The OIL and GAS JOURNAL

PRODUCING REFINING ENGINEERING MARKETING

VOL. 29. NO. 14. TULSA, OKLAHOMA, AUGUST 21, 1930

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Proration Rules Under Consideration

Highest daily average estimated total production in 1929, week ended Aug. 24, 2,975,435 bbls. Lowest in 1929, Dec. 27, 2,595,320 bbls.

Some Oklahoma City Operators Ask for Increase in Output. Texas Commission Issues Conservation Order

Highest daily average estimated light oil production in 1929, week ended Sept. 14, 2,534,524 bbls. Lowest in 1929, Apr. 13, 2,142,036 bbls.

By Andrew M. Rowley

Efforts to hold crude oil production at or below market requirements seems to be the chief concern of the producing branch of the industry at this time. Dissent from plans to continue the proration agreement in the Oklahoma City Field has been voiced by several operators there. They desire an increase in the allowable production although the purchasers of the output of this field state they will not buy any more crude than that permitted to be produced under the present agreement. The possibility of a drastic reduction in prices for crude in the Oklahoma City Field, should production be permitted above the figure the pipe line companies are willing to accept, is seen in statements made by executives of purchasing companies.

The Railroad Commission of Texas has issued an order, effective August 27, subject to possible modifications, reducing production in that State to 750,000 barrels daily. This would mean a decrease of 83,639 barrels daily from the production of last week. The commission will hold a hearing next Monday to consider objections to the order as it relates to certain areas.

California operators are confident the conservation movement in that State is on a firm footing and will be continued for another year or until such time as market requirements indicate a need for greater production. The industry is beginning to realize no substantial improvement in the situation can be expected until present stocks of both crude and refined oils are reduced very materially. Notwithstanding the fact crude oil production last week averaged more than 500,000 barrels daily less than it did during the similar period last year and that consumption of gasoline is greater, stocks of both crude oil and gasoline are more than they were at this time last year.

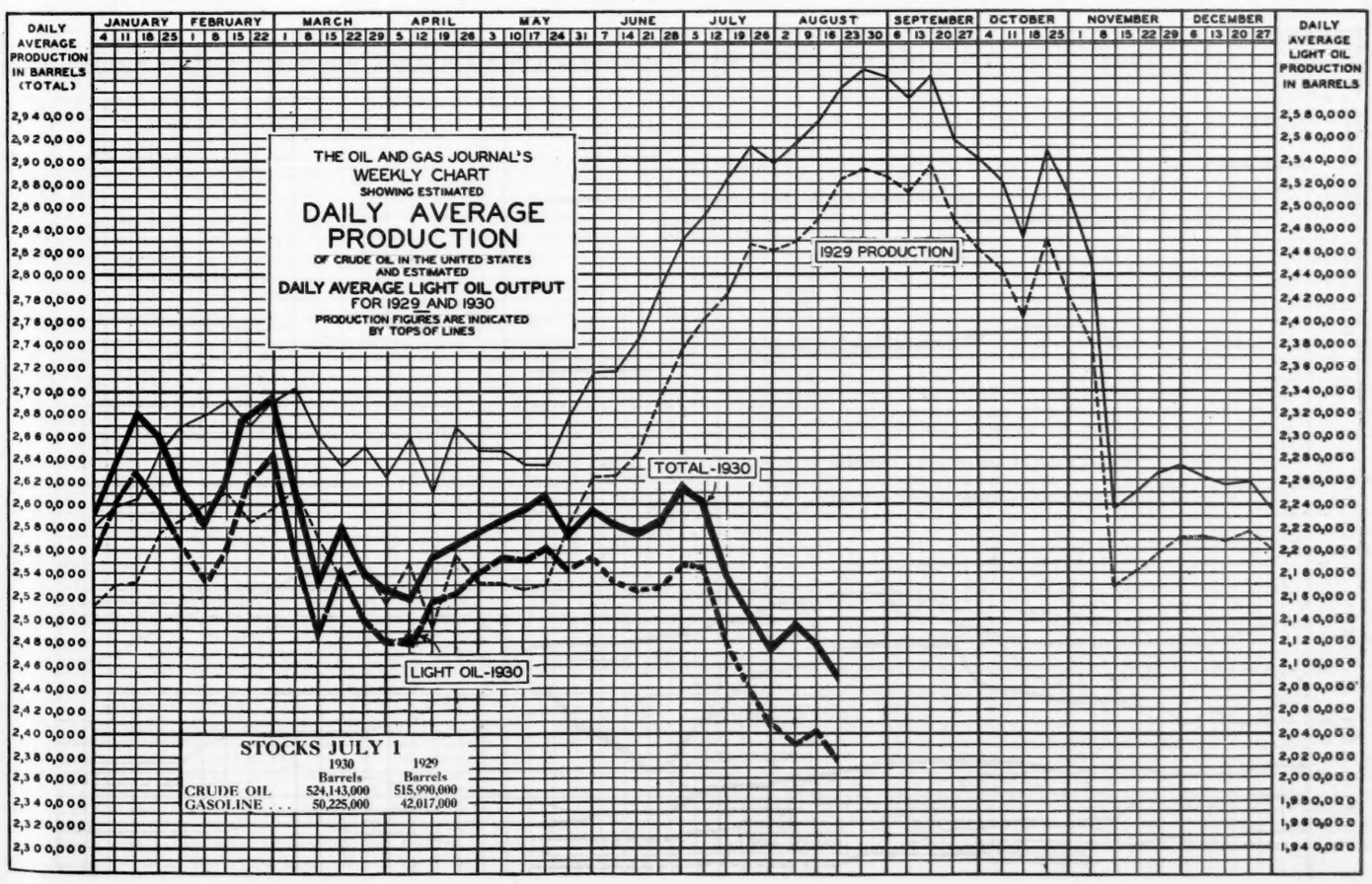
The industry will not permit a few operators to endanger the complete success of the conservation movement. High development costs in the Oklahoma City Field should have been foreseen and development work kept more in line with the principle of the conservation movement.

PRODUCTION IN THE UNITED STATES

Estimated daily average production of light and heavy gravity oil in the United States for week ended August 16 and a comparison with the previous week follows:

	August 16		August 9	
	Light	Heavy	Light	Heavy
Oklahoma—				
Oklahoma City	70,615	.....	96,885	.....
St. Louis-Pearson	26,920	.....	23,465	.....
Seminole	147,385	.....	136,770	.....
Northern miscellaneous	231,920	.....	240,510	.....
Southern fields	60,915	.....	62,445	.....
Total Oklahoma	537,755	.....	560,075	.....
West Texas—				
Hendricks	78,005	.....	77,315	.....
Yates	107,125	.....	107,130	.....
Remainder	107,014	.....	109,348	.....
Total West Texas	292,144	.....	293,793	.....
North Louisiana	35,755	5,310	37,420	5,225
Arkansas	18,145	37,300	18,195	37,300
North Central Texas	125,630	.....	125,005	.....
Texas Panhandle	99,710	.....	97,725	.....
East Central Texas	40,805	.....	39,901	.....
Kansas	114,320	.....	117,485	.....
Total Mid-Continent area	1,264,264	42,610	1,289,599	42,525
Gulf Coast	.....	200,885	.....	200,966
Southwest Texas	.....	105,002	.....	106,376
Eastern	121,000	.....	121,000	.....
Rocky Mountain area	103,244	.....	103,893	.....
California—				
Santa Fe Springs	108,000	.....	109,500	.....
Long Beach	105,000	.....	102,500	.....
Playa Del Rey	17,000	.....	13,000	.....
Elwood	46,000	.....	49,000	.....
Ventura Avenue	48,000	.....	48,000	.....
Seal Beach	20,300	.....	20,500	.....
Remainder of State	187,000	84,500	185,400	86,000
Total California	531,500	84,500	527,900	86,000
Total United States	2,020,008	432,997	2,042,392	435,867
Grand total	2,453,005		2,478,259	

Total Decrease 25,254 Bbls.; Light Oil Decrease 22,384 Bbls.



Oklahoma Refinery Prices Mark Time

Statistical Position of Market Favors Advance but Price Cutting Continues Unabated. Naturals Firm

By W. T. Ziegenhain

There were no new developments in the Oklahoma refined oil market during the past week that caused any material change in prices or led to a conclusion regarding trends in the immediate future. Gasoline continued to be sold over a wide range of prices, with some U. S. Motor going as low as 5½ cents in an effort to compete with Chicago quotations on deliveries into common marketing territory which were even fractionally lower, on the Group 3 basis. This condition has persisted for many weeks and it is apparent that, despite any favorable showing the Mid-Continent refiners may make in lesser crude runs, lesser stocks, etc., the price level will not be changed until the Chicago situation is correspondingly changed. Natural gasoline prices were firmly held at last week's level of 5½ cents on all grades, although there was a lesser demand as the week closed. Kerosene is being freely offered at the low of last week's price range, with distillate trading at a very low ebb.

Lubricants are also moving very slowly and the recent price reduction did not seem to have attracted jobbers into the market even though it is believed their stocks are abnormally low. Fuel oil remains unchanged and the future of the market is not generally viewed with optimism despite the expected betterment in the demand as the fall season is approached. Wax prices are unchanged on current shipments but contracts calling for future deliveries carry prices from ⅛ cent to ¼ cent higher than present deliveries.

500,000 Bbls. Less Crude

With crude production 500,000 bbls. a day less and at the lowest figure it has been this year, refiners cannot point to the crude situation as the "uncontrollable" factor. At almost any other time, such a condition in the status of crude production would be a signal for optimism in refinery circles, but this is not apparent now. In addition, some definite steps have been taken over the past week in regard to curtailing crude runs. The Producers & Refiners Corp. has shut down its West Tulsa refinery for a period of 10 days and the Empire Oil & Refining Co. is shutting down its Cushing refinery for an indefinite period. Other companies have established lower schedules and it is believed that actual runs for August will be below those anticipated on the first of the month. Yet there is only passive resistance to the buyers' demands.

Fuel Oil Situation

All grades of fuel oil are weak. This condition has been existing for months and is aggravated from time to time by the offering of low priced fuel in large quantities from refineries in the Chicago area. The Mid-Continent refiners are confronted with another unfavorable factor. The railroads, which have been the most dependable purchasers of fuel oil in the Mid-Continent in the past, are now calling for the minimum on many of their contracts and the difference must be disposed of elsewhere. Their car loadings have been considerably less than for several years and this factor accounts for the present condition in the heavy fuel market.

Jobbers are not making purchases of lighter fuels for storage either, despite the present low level of prices. They feel there will be ample time elapse before the market can be advanced materially. It is generally believed, however, that the lighter gravity fuels will be the first to show an improvement and they might advance without a general advance being made in the entire list.

Gasoline

The U. S. Motor gasoilne market established by the larger refiners showed quotations ranging between 6¼ to 6½ cents in contrast with the 5½-cent price at which sales were made by others. Even the lower price of 5½ cents was not attractive to some price buyers who said plenty material was available out of the Chicago area at 5¼ and 5⅜ cents, Group 3 basis. The lighter gravity gasolines were unchanged although the removal of approximately 2,000,000 gallons of 375 endpoint material during the week, on a sale made a week ago, offered a little encouragement. This gasoline is to move export and the price paid was said to be 6¼ cents.

Natural Gasoline

The natural gasoline market was firm

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REFINED MARKET BAROMETER

Although the position of the refined oil market has generally improved statistically, there is no thought of improved prices. Gasoline is being offered freely in all sections at last week's quotations and the California market has shown a price recession. The scramble to maintain gallonage by holding the larger customers has prompted the posting of unusually high discounts for these accounts and some believe the next step will be the posting of general tank wagon reductions as soon as the consuming season passes. Kerosene is freely offered. Natural gasoline was firmly held at last week's price level, in the Mid-Continent but a slight recession was noted in California. Lubricating oils are finding a slow movement in all markets. Stocks remain heavy in the Mid-Continent, Gulf Coast, Eastern Seaboard and in Pennsylvania and price shading is in evidence. Fuel oils developed further weakness on the Gulf Coast with no change shown elsewhere. Wax shows a slight recovery with the future of that market looking a little better.

Mid-Continent.—The gasoline market was unchanged. Kerosene is being freely offered with the balance of the list of standard products, except wax, moving at less than a normal rate.

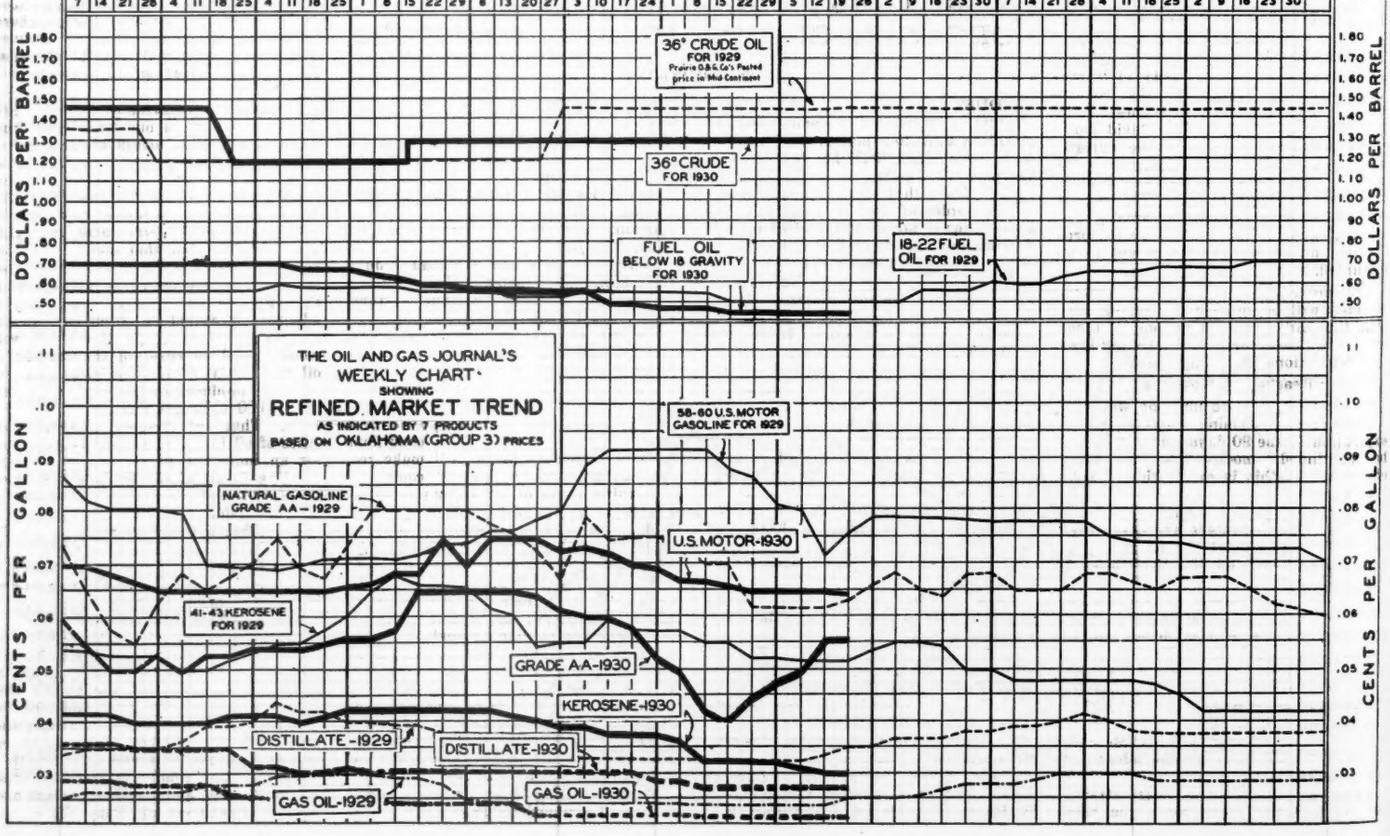
Eastern Coast.—A slight recovery in the gasoline market developed during the week but other products remained dull. Cylinder stocks were quoted at lower prices.

Chicago.—Low priced gasoline was persistently offered throughout the week and other products are simply holding their own.

Gulf Coast.—The refined oil market remained dull with gasoline being offered at slight price recessions as the week drew to a close. Fuel oils were considerably weaker. Lubricants are being freely offered at last week's prices.

Pennsylvania.—While some thought a slight improvement in the tone of the market was apparent, there was no evidence of this in price advances.

California.—Natural gasoline weakened slightly but the balance of the products remained unchanged.



Texas Maximum Set at 750,000 Barrels

District Hearings to Be Held August 25 and Order by Railroad Commission Effective August 27. Further Hearing in November

AUSTIN, Tex., Aug. 18.—The Railroad Commission of Texas has issued its first general oil proration order applying to the entire State and fixing the maximum production at 750,000 bbls. a day for a 90-day period, beginning August 27, with hearings accorded August 25 to persons or groups dissatisfied with the allotments given any field. The reduction would be about 70,000 bbls. daily.

Each field will have its proration plan drawn up by a committee of operators, subject to approval by the Railroad Commission. A general hearing will be held in Austin two days before the date of effectiveness, at which the Railroad Commission hopes to bring all operators into agreement.

The proration order was based almost wholly upon the commission's authority to prevent waste of natural resources.

Waste Explained

R. D. Parker, oil and gas supervisor for the Railroad Commission, said that an independent order eliminating small or marginal wells from this or subsequent proration orders would be submitted for consideration of the oil operators at the August 25 hearing, on the premise that many of these wells could not be pinched without irreparable damage. Evaporation and loss of volatile elements in the stored crude, and that crude in storage was increasing daily, with an inadequate demand to take care of the supply, was in fact a waste of natural resources, justifying the State to intervene to prevent such accumulations of storage and consequent waste by evaporation.

The maximums assigned each field are practically the same as adopted by the State Committee on Curtailment and Equalization, thus leaving the August 25 hearing to smooth over any specific objections.

The Gulf Coast was again assigned a maximum of 150,500 bbls., but tentatively, depending upon proration agreements now in process of making.

The same maximum of 276,350 bbls. was allotted the West Texas territory, which includes the University of Texas oil lands with some wells, the deepest in the world, at 8,500 feet. These wells are now being inspected by David Donoghue, technical adviser to the curtailment and equalization committee, upon whose report on August 25 will depend any attempted choke there. The university and its lessees opposed throttling and urged a six-year contract, taking the production, as advantageous and not to be disturbed.

The order says only persons actually affected will be entitled to hearing, and that this order relieves no one of other than strict compliance with existing laws and regulations governing the oil.

Hearing in November

In November the commission will hold a hearing to determine whether, at the expiration of the 90 days, the order shall be continued, modified or otherwise changed, and this is due notice of such hearing.

The committees of the different fields as selected by producers are encouraged to aid in working out the machinery of orderly proration and effective conservation.

Rumblings of contests of the commission's power to effect state-wide proration and of the reasonableness of its orders have been heard and court action may result unless the August 25 conferences produce agreements. The Laredo district, where objections were raised to any curtailment, is placed in the Southwest Texas area and a tentative maximum of 67,150 bbls. for the whole territory adopted.

Apparently anticipating court attacks, the commission's order recite the basis for its action as well as the laws under which it acted. This would be its justification in court. The first claim is that the constitution, as amended in 1917, clothes the commission with power to enact laws for the conservation and development of the natural resources of the State and that pursuant to this authority statutes were enacted as contained in title 102, Revised Statutes of 1925, the order in that connection, saying: By this act the legislature has forbidden comprehensively the production of crude oil or crude petroleum "in such manner and under such conditions as to constitute waste" and the duty is placed upon the Railroad Commission of Texas to "do all things necessary for the conservation of oil" and to "establish such rules and regulations as will be necessary to conserve the oil and gas resources in the State."

Action Explained

"This commission was made the agency of the legislature to control for it the production, storage, carriage and purchasing of crude oil for the primary purpose of protecting a natural resource in which there is a measure of ownership common to all our people. Several phases of the conservation act just referred to have been before the courts of this State in cases where the power of this commission to enforce regulations for the conservation of crude oil and natural gas has been sustained.

"There is not included within the authority vested in this commission, under the acts referred to, the power to adjust the supply of petroleum to the demand of the market, therefore to bring about an increased price of the commodity. While, as citizens, the commission may have a keen interest in the economic welfare of the large group of its citizens whose capital is devoted to the production of oil, it can not be the guardian of their pecuniary interests. The functions assumed by our government can not include that of an economic dictator. It is apparent, therefore, that this commission can not limit the production of crude oil in this State through any proration order upon any other basis than proper considerations involving the interests of all the people of our State.

"If there be within this State production of petroleum in excess of demand and this excess production results in actual waste of the natural resources of the State, this commission has the power, and it is its duty, to make such rules or regulations as may be necessary to insure the conservation of the resources so wasted."

Basic Facts

Following this legal justification, the commission then finds the following basic facts as justifying the order and its validity:

"1. That the world is now producing much more petroleum than necessary to meet the demand and there is now in storage on top of the ground enormous quantities of petroleum. The amount of oil being produced in the world is daily adding to the accumulation of storage oil because of the excess of production over demand.

"2. Generally speaking, outside of Texas, the oil industry and regulatory bodies have taken steps toward the conservation of oil in its natural reservoirs. In the principal oil producing states of this country, oil wells and oil fields have been prorated through co-operation on the part of the industry or through the mandates of governmental units, so that the supply of oil taken from the earth may be adjusted to the demand for consumption, and waste thereby eliminated. The existing and threatened overproduction in Texas is the chief menace to the balancing of supply and demand, and the principal threat that our natural resources will be wasted through continued storage in its crude state.

"3. That the unrestricted production of petroleum within the State of Texas is causing waste, in that when petroleum is removed from the strata in which it is found into artificial storage the action of the evaporation, heat, etc., causes such petroleum to lose its lighter volatile elements, and no method has yet been devised to prevent its constant evaporation, shrinkage and deterioration when held in storage for any length of time.

Waste Described

"These lighter volatile elements escape never to be regained, so that when quantities are being run to storage the amount of resulting waste is enormous. Waste is also being occasioned by reason of the fact that the major purchasing companies of Texas seeking to avoid discrimination between the producers of oil from whom they purchase and by reason of the world overproduction have adverted to are curtailing their purchases in varying amounts, in some instances purchasing only 40 per cent of the oil actually produced and in some instances purchasing only 5 per cent of the oil which could be produced. There are thousands of marginal wells in Texas, some of them old and producing only small quantities of oil daily. There are thousands of wells in Texas producing quantities of water along with oil.

"By reason of such curtailed purchases, the operators of these marginal wells and wells producing quantities of salt water are forced to limit the daily operations of such wells. Most of such wells will thereby be destroyed and all of them by such treatment will be impaired in their ability thereafter to produce oil in such quantities as they would have produced, but for such limited operations. Thereby the amount of oil ultimately recoverable through such wells will be decreased to such an extent as to amount to a material waste.

"Moreover, the taking of a greater proportion of oil from one lease than from a contiguous lease brings about a reduction of the gas pressure in the latter lease, and to that extent reduces the quantity of oil recoverable therefrom. The oil not recoverable is wasted to the people just as though it evaporated into thin air. This, we find, that under conditions now existing and that will likely continue during the period of 90 days from the effective date of the rules therein adopted, it would be injurious to the oil and gas bearings in this State, and would result in reducing the amount of oil ultimately recoverable therefrom for oil to be produced in this State in excess of 750,000 bbls. per day.

"4. That the running of vast quantities of oil into storage, and its retention for an indefinite period of time, is now creating in all of the fields of Texas an additional and unnecessary fire hazard in each field.

"5. That a public necessity exists for the intervention of this commission to make and enforce equitable proration in the amount of oil that may be produced within the State in such manner as to prevent existing and potential waste.

"6. That for a period of 90 days beginning August 27, 1930, at 7 a. m., not more than 750,000 bbls. daily should be produced in Texas for the reason that such amount is the maximum market available to oil producers in Texas, and any other oil produced in Texas in excess of that amount would cause waste.

"7. To that effect this proposed order so limiting the amount of oil which may

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OPERATORS IN GULF COAST AREA ORGANIZE CURTAILMENT COMMITTEES

By Neil Williams

HOUSTON, Tex., Aug. 18.—A well-perfected organization of committees representing operators and producers in all Texas Gulf Coast fields has been at work the past week making surveys of the various fields with a view toward following out the order of the state railroad commission for a period of curtailed oil production in Texas which will become effective beginning August 27.

For the purpose of these surveys and carrying out a program of curtailed production and conservation of natural resources, Texas Gulf Coast fields have been placed in 16 groups, each group being in charge of a committee of five. Chairmen of the respective committees, who selected their associate committeemen, were appointed by the Gulf Coast general committee, of which P. C. Murphy, general manager of the Humphreys Corp., Houston, is chairman. These committee chairmen and their respective groups of fields follow:

Allen—H. F. Montgomery, Mills Bennett Production Co.

Barbers Hill—S. A. Judson, Humphreys Corp.

Batson, Boling, Port Neches, Humble and Sour Lake—F. C. Sealey, The Texas Company.

Blue Ridge, Big Creek, Fannett, Hankamer, High Island and Orchard—John Tucker, Gulf Production Co.

Damon Mound—B. G. Von Roeder, Sinclair Oil & Gas Co.

Esperson—Harry Reynolds, Cranfill-Reynolds Co.

Goose Creek, Moss Bluff, Raccoon Bend, DeWalt and West Columbia—D. B. Harris, Humble Oil & Refining Co.

Hull—Joe Russell, Republic Production Co.

Lost Lake—C. E. Sutton, Pure Oil Co.

Markham and Nash—Adrian Moore, Rycade Oil Corp.

North Dayton—Elwood Fouts, Abercrombie & Harrison.

Orange and South Liberty—R. W. Pack, Sun Oil Co.

Pierce Junction and Saratoga—John Hutcheson, Rio Bravo Oil Co.

Spindletop—Judge Beaman Strong, Yount Lee Oil Co.

Refugio and Pettus—R. H. Hargrove, Union Producing Co.

Brenham—A representative of Butler & Calhoun.

According to the work outlined by the general committee, the field committees, following a careful survey of conditions in their respective fields, will make recommendations to the general committee concerning means of curtailing production and as to what limits production can be held. The survey to be made will include the obtaining of the following information:

Flowing wells—Number and location; daily production from each well, showing oil, water and gas; size of chokes on each well; whether flowing through casing or tubing; gas oil ratio; age of well; gravity of oil; name of producing formation; who is running oil.

Drilling wells—Number and location; cause for drilling each well; whether any present drilling wells can be shut down after casing is set; spacing of wells; distance of new wells from lease lines.

Future drilling—List of leases which

(Continued on Page 113)

Mid-Summer Rotary Drilling Fantasy

Suggested Combinations of Known Rotary Practices Into a Drilling Method as a Means of Reducing Development Costs

By L. G. E. Bignell
Petroleum Engineering Editor

During this period of proration in the principal oil-producing states it has been suggested that one well placed in the center of a 40-acre tract would be sufficient. This idea meets objection because it is generally accepted among oil producers that to give proper protection to the land owner's rights to the oil and gas under his land wells must be drilled along the property lines, and this in most cases means one well to each 10-acre tract.

If some way could be devised that would be a compromise between these two conditions it might find favor with both the producers and the owners of the land. Based upon this theory that such a method of drilling might be put into practice, this article is written.

It was not so long ago that the industry was very much concerned with crooked holes that were drilled in many fields. Because of the many difficulties that followed completion of wells that deviated from the vertical steps were taken to correct this evil and now most wells are practically straight.

To check the verticallity of bored holes many instruments have been designed and put into practical use, some of them giving declination from vertical only, while others will give both declination and azmuth, or the direction in which the hole deviates from the vertical.

With this knowledge available and instruments at hand to permit a check of rotary drilled holes at any time during drilling it is suggested that it might be possible to so control the direction of drilling in a bored hole as to deviate from the vertical in any predetermined direction and thereby bottom the hole at any desired place within the lease.

Drill in Center of Lease

With the knowledge of causes of deviation of hole from the vertical and methods devised to straighten them again when the declination from vertical was over any agreed amount it is possible to reverse the application of such knowledge and by spotting the well in the center of a 40-acre tract drill it vertically to any predetermined depth and then by the use of a hydraulic oriented whipstock change the course of the drill to cause the hole to be drilled in any desired direction at any desired angle.

The edges of a 40-acre tract measure 1,320 feet each way and with four locations in the center of 10-acre tracts the wells are located 330 feet from each corner. The distance between two wells along a property line will be 660 feet and a well placed in the center of the 40-acre tract would then be approximately 466 feet distant from the usual place where any one of the four wells would be located if these wells were drilled in the corners.

The only thing of any consequence to the producing company, and likewise the land owner, is to penetrate the producing horizon at some place about 330 feet from the property line and whether this penetration is made by drilling one well in the center of each 10-acre tract straight down to the producing horizon, or by drilling into the producing horizon with four wells that deviated in four directions toward the corners of the lease from the bottom of a shallower well drilled in the center of the lease, should make no material difference, if after penetrating this producing horizon the well can be produced.

The accompanying sketch shows the proposed method of drilling a central well to 6,500 feet in a field similar to the Oklahoma City Pool and by so doing save approximately $176,000 and still penetrate the producing sands in four places, each 330 feet from the corners of the 40-acre tract.

Proposed Method of Drilling

In Oklahoma City it is customary to drill the 12½-inch hole to 5,500 feet and there set the 9-inch casing. The producing horizon is approximately 1,000 feet deeper. To drill the 12½-inch hole to 5,500 feet at $11 per foot would cost about $60,500.

It is proposed that this hole be finished by running the 9-inch casing and cementing it in the usual way.

From this point to the producing horizon it is proposed to drill four holes that are carried as straight as possible from the bottom of the 9-inch hole to points that are directly beneath the 330-foot locations on the surface where the wells would have been placed if usual practices were followed.

It would first be necessary to drill a "rat hole" a sufficient distance beneath the bottom of the 9-inch casing point to accommodate the hydraulic oriented whipstock. It is suggested that this "rat hole" be cemented and then drilled out so that a shell of cement would be left in the lower portion of the hole to support the walls during the following operations.

Use of Oriented Whipstock

When the hole is ready for the whipstock it is suggested that it be put in place and then checked as to orientation with suitable surveying method and then turned so that the beveled top will divert the bit toward one corner of the lease.

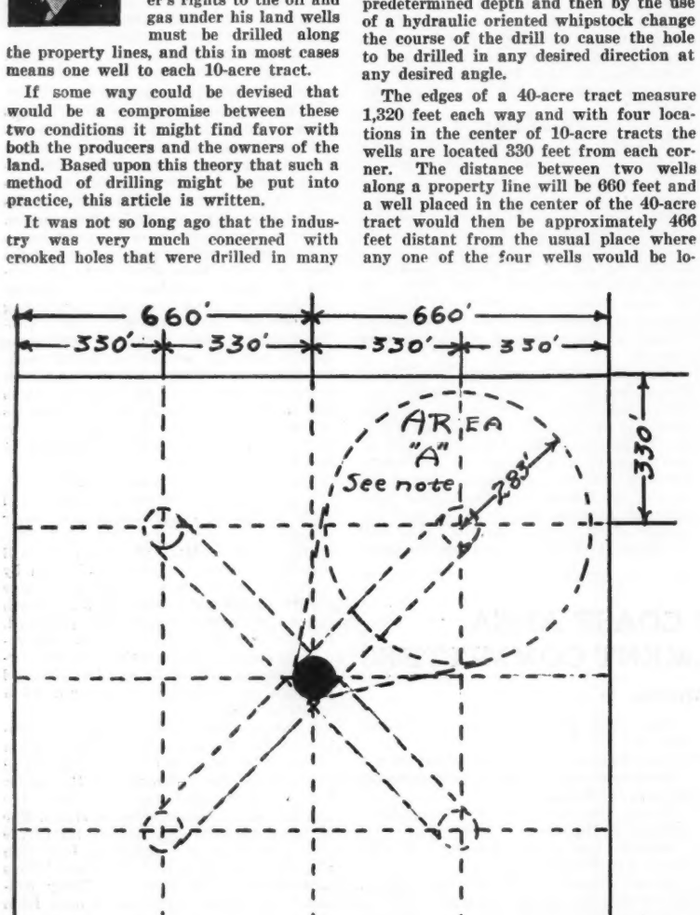
At an angle of slightly under 25° the hole will have a departure of about 466 feet from the center of the lease when it reached 1,000 feet in depth, or in other words will penetrate the pay zone at an angle of 25° 330 feet from the corner of the property lines.

The drilling practice would be the same for each bottom hole and when they were all completed there would be four 25° holes drilled for 4½-inch casing into each corner of the lease.

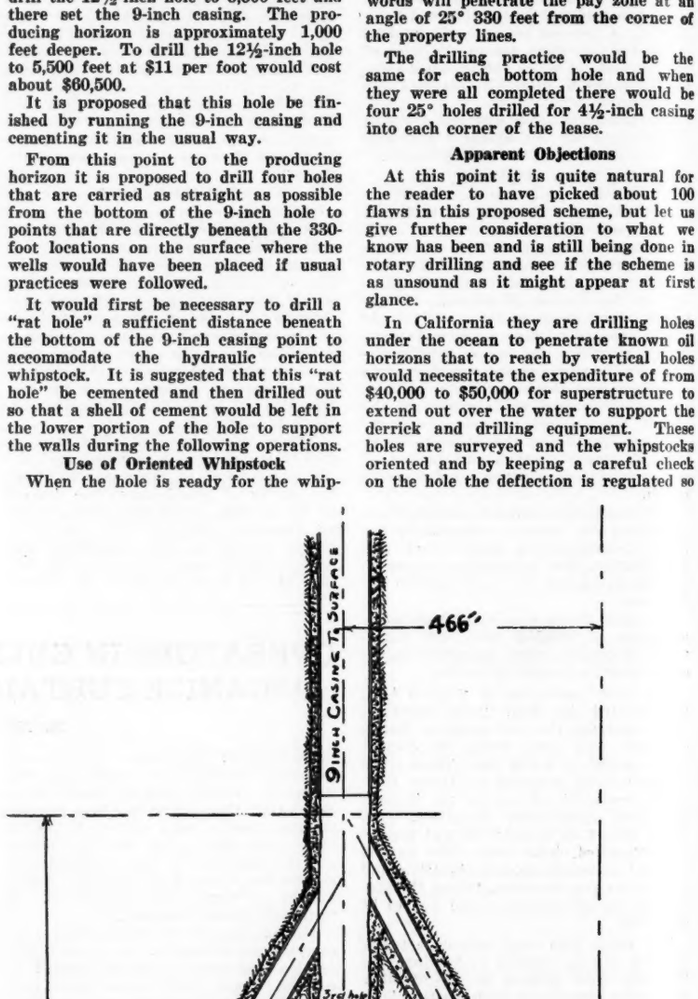
Apparent Objections

At this point it is quite natural for the reader to have picked about 100 flaws in this proposed scheme, but let us give further consideration to what we know has been and is still being done in rotary drilling and see if the scheme is as unsound as it might appear at first glance.

In California they are drilling holes under the ocean to penetrate known oil horizons that to reach by vertical holes would necessitate the expenditure of from $40,000 to $50,000 for superstructure to extend out over the water to support the derrick and drilling equipment. These holes are surveyed and the whipstocks oriented and by keeping a careful check on the hole the deflection is regulated so



Plot of 40-acre tract showing central and angle well system of drilling. The area "A" represents the space at bottom of a 6,500-foot hole within which the well would be completed if the total declination from vertical was 2½ degrees. The dotted lines tangent to the circumference of this circle indicate possible deviation of an angle hole to come within this area if drilled from the bottom of the central vertical hole.



Sketch showing general arrangement of central and angle wells. The central well would be completed to the producing horizon if it is to be used to return formation gas to the sand.

that the sands are penetrated very close to the predetermined point.

In diamond drilling in mining it has long been the practice to divert the direction of the bit to take in territory that could not be reached by a straight hole.

Deflecting Diamond Drilling

In the August Bulletin of the American Association of Petroleum Geologists there is a paper by Robert D. Longyear on "Examples of Deflecting Diamond-Drill Holes" that is very interesting and outlines a method, which, with some change, could be applied to rotary drilling.

In part Mr. Longyear says:

"The most interesting feature of this work was the controlled deflection of the holes with and without the use of wedges.

"The natural tendency of diamond-drill holes cutting the strata at a fairly large angle is to turn in a direction normal to the plane of stratification. In this work, this tendency was purposely accentuated by increasing the pressure at the depths where it was desired to start the flattening of the holes, the object being to crosscut the formation more rapidly.

"In the wedge method, a steel wedge was lowered into the hole with the drill rods and cemented in place. The wedge was lowered approximately oriented by marking the rods as they were lowered into the hole. The entire exploration presented considerable difficulty, on account of the extremely brecciated nature of the ground in this locality, necessitating much reaming, casing and cementing.

"The process of deflection of diamond-drill holes by wedges has been very much improved since this work was done.* Wedges can now be purchased which can be readily oriented without using the doubtful process of 'lining the rods.' This orienting is accomplished by (1) placing a 'drive wedge' in the hole at the desired point; (2) surveying with a special clinometer the position of the upper beveled surface of the drive wedge; (3) adjusting the relative position of the pilot wedge with respect to the deflecting wedge so as to correspond with the observed position of the drive wedge, and (4) placing the deflecting wedge in the hole so that the bevel on the pilot wedge is properly located on the bevel of the drive wedge. Vertical diamond-drill holes more than 3,000 feet in depth have been drilled with excellent directional control by the skillful use of these wedges to correct tendencies to divergence from the vertical."

The articles describes exploratory work done with the diamond-drill in the Marquette Iron Range, Michigan, where five holes were deflected at varying angles out of one formation into another for the purpose of securing cores from the iron bearing formation.

The article by Hall and Row gives some interesting data on the method then in use for wedging diamond-drill holes and their control of this work was very accurate.

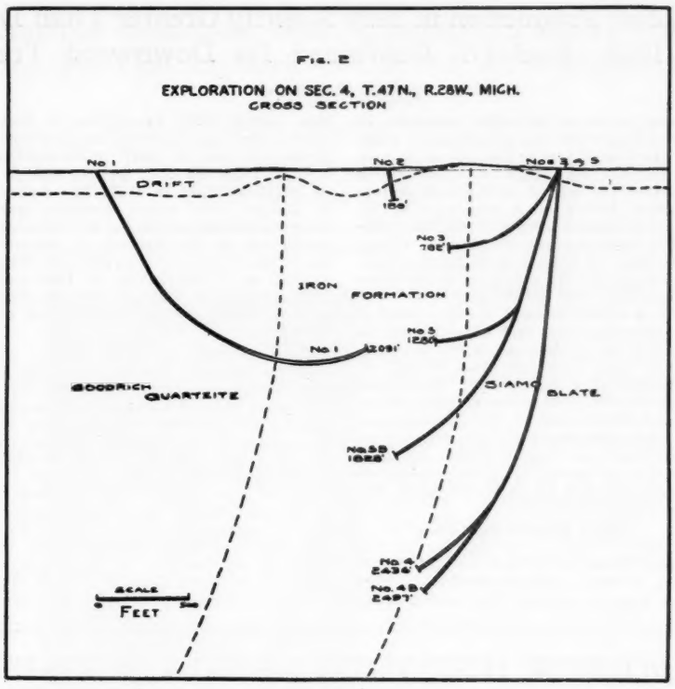
It is also understood that in cable tool drilling holes have deflected to penetrate oil sands on opposite sides of the vertical hole, and in this way drainage was obtained from a coned shape area with increased rate of production. The control of direction in this type of work was within 1 degree of the predetermined angle of desired deflection, and if it is not possible to deflect the rotary drill as desired it would be possible to start the deflected holes with cable tools and then change to rotary to finish.

So there is evidence that the idea is partly used in some places now and the use of it to complete one central well and four angle wells to the four corners of the lease is, therefore, not so far-fetched as it might seem.

The total footage of the four angle holes would amount to 4,416 feet approximately or at $11 per foot would cost about $48,576, which added to the $60,500 for drilling 5,500 feet of vertical hole would bring the total cost of exploring the 40 acres to $109,076.

Four vertical wells each reaching the sand in the center of the 10-acre corner tracts at 6,500 feet would cost, at the same drilling rate, $286,000. This saving of $176,924 does not take into account the cost of four derricks and four set-ups of rotary equipment, and also the saving of three strings of 9-inch casing each 5,500 feet long as well as three surface strings.

*O. Hall and V. P. Row, "Wedging Diamond Drill Holes." Trans. Amer. Inst. Min. & Met. Eng., Vol. 63 (1920), pp. 413-18.



Sectional view of system of diamond-drill bore holes diverted from the vertical to explore an iron ore formation in Marquette Iron Range, Michigan. From Longyear's article, "Example of Deflecting Diamond-Drill Holes," A.A.P.G. Bulletin, August, 1930.

Suggested Method of Casing

If it is agreed that the holes could be drilled with a reasonable amount of accuracy at an angle of 25° in each of the four directions from the center of the lease there still remains the problem of setting the 4½-inch casing and producing the wells.

In Seminole much casing was run in holes that were so crooked it is still a topic for discussion that the pipe held together until it reached bottom, and it should therefore not be impossible to run a string of 4½-inch pipe 1,104 feet long into a comparatively straight hole at an angle of 25° from the bottom of the vertical hole.

It is proposed that the hole be completed just as it would be completed if it were drilled straight and the casing point above the sand be selected in the usual manner.

This being done and a careful record made of the hole by survey and measurement, it is possible to measure quite accurately the amount of pipe needed for the 6½-inch hole.

No small casing would be run into the well until all four angle holes were completed to the casing point above the pay sand where the 4½-inch strings were to be seated. The full length strings of 4½-inch casing would then be run, one at a time, and cemented by the usual practice for the full length of the angle hole.

The 4½-inch string would be made up with a back-off nipple placed at the point where the 4½-inch pipe entered the central hole. The upper part of the string would be unscrewed and any portion of the 4½-inch casing extending into the large vertical hole could be milled away.

This process could be repeated until each angle hole was cased and cemented and then the central well and each of the angle wells could be loaded with heavy mud for the drilling in operation.

Replace Whipstock

It then becomes necessary to run in with the bit and drill into the sand the required distance to get the oil. Under all drilling conditions the well is loaded with heavy mud so the danger of blowout is no greater under this method than with straight drilling.

The four wells having been completed into the sand, the well is, or rather the wells are, ready to bring in, for by bailing down in the 9-inch casing the four wells will each be relieved of their bottom hole pressure equally.

It is obvious that all four holes will not bottom in the same kind of formation even if it is the same sand so the bottom hole pressures in each well will vary, but the one that has the greatest pressure will relieve the 9-inch hole of its mud, and when this is done the other

(Continued on Page 114)

Ups and Downs of Crude Production

Record of 100 Pools in Mid-Year From 1927 to 1930, Inclusive, Show Many Pronounced Changes

By James McIntyre

It is difficult to draw comparisons in the performance of American oil fields this year and in other years because of the difference in the production policy prevailing in 1930 to that in years past. This has been a year of unusual curtailment. More pools and fields are restrained from producing their capacity than at any previous time because the potential production of the United States is greater in mid-year 1930 than ever before. When we try to match the performance of the largest fields in 1930 with the largest producing areas in any recent year it is to the discredit of the leaders in 1930, which have not been permitted to do what they are capable of doing in the matter of crude output.

The accompanying table lists 100 fields or pools and their average daily production in June, 1930, and the same month in the three years just previous. The biggest producer in the list in June, 1930, was Oklahoma City, with an average of 113,475 bbls. per day. That field could just as easily have produced 500,000 bbls. a day as 100,000 bbls. With the exception of the Yates Pool, in Pecos County, Texas, no American pool in history could have equaled Oklahoma City's potential, and yet the table will show fields in recent years that greatly exceeded Oklahoma City's record of 113,475 bbls. per day. In June, 1929, the Hendricks Pool, in Winkler County, Texas, was producing 142,651 bbls. per day; Santa Fe Springs, California, averaged 237,466 bbls. per day, and Long Beach, California, averaged 169,018 bbls. per day. In June, 1928, the Hendricks Pool made 148,566 bbls. per day as an average for the month, and Long Beach, California, 194,356 bbls. per day. In 1927, the Seminole City Pool, in Oklahoma, averaged 118,221 bbls. in June; the Bowlegs Pool, 144,490 bbls., and the Borger Pool, in Hutchinson County, Texas, 101,014 bbls.

The big performers in June, 1930, were led by Oklahoma City with 113,475 bbls.; Santa Fe Springs averaged 113,048 bbls., and the Yates Pool 112,850 bbls., and these leading pools were all under curtailment orders. Between them they could easily have produced 1,250,000 bbls. a day for the month, and how much more than that the reader's guess is as good as the writer's.

But the most interesting thing about the table is to note the tremendous decline in some flush fields in the course of three years. The Bowlegs Pool, which produced an average of 144,490 bbls. in June, 1927, dropped to 61,121 bbls. a day in a year, and to 21,442 bbls. a day in three years. The Seminole City Pool fell off from 118,221 bbls. to 21,956 bbls. in three years and the Borger Field from 101,014 bbls. to 23,123 bbls. Spindletop dropped from 60,525 bbls. to 17,659 bbls. in three years; Seal Beach, California, from 66,338 bbls. to 20,401 bbls.; Smackover (heavy) declined from 88,266 bbls. to 39,307 bbls.; Huntington Beach, California, from 89,651 bbls. to 28,499 bbls.

The table is valuable in showing the natural decline of older fields that reached their settled or semisettled state in 1927. Fields like Burbank, Tonkawa, Healdton, Hewitt and Cushing in Oklahoma, for example, come under this head, and Burkburnett, Powell and Mexia, in Texas, besides numerous other pools once famous for their large production. Old pools which had a new lease of life given them through deeper drilling are included in the table, Humble, Texas, is one of these, and Long Beach and Santa Fe Springs, in California. The system of water flooding practiced in the Bradford-Allegany district, in northern Pennsylvania and southern New York, it will be noted, brought the production of those old fields up nearly 100 per cent in three years.

One feature of the table is the large increase in production of the miscellaneous fields. In June, 1929, the 94 pools produced an average of 2,303,570 bbls. per day and all other fields a total of 476,424 bbls. per day, while in June this year 100 pools produced 2,044,680 bbls. per day and all other pools 542,631 bbls. per day. A large number of new productive spots were opened to production in the past year which, without yet becoming important enough to get into the major class, combine to produce a large total. Some of them would have been numbered among the 10,000-bbl. pools if it had not been that they were operated under a

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Mexican Refineries Increase Output

Gasoline Production in 1929 Slightly Greater Than During 1928. Fuel Oil Continued Its Downward Trend

Specially Contributed

Gasoline output of Mexican refineries reached a total of 3,339,776 bbls. during 1929, a slight increase over the 3,334,813 bbls. produced during 1928, according to the volume of 1929 petroleum statistics recently issued by the Petroleum Section, Department of Special Taxes, Mexican Department of the Treasury. The output of gas oil was considerably greater than that of the two preceding years, but the production of fuel oil continued the decline prevalent during 1927 and 1928. Kerosene production was slightly more than in the two previous years.

The principal effect of the decline in Mexican crude oil production has been felt in the supply of fuel oil and heavy crude used for fuel purposes. The 1929 production of crude, 44,687,500 bbls., was 19,433,622 bbls. less than the 1927 production of 64,121,122 bbls. Of this decline, 18,760,177 bbls. represented decreases in heavy crude production, while light crude production declined only 673,445 bbls. In as much as Mexico is not a a large consumer of oil for fuel purposes, the decline in the production of Mexican heavy crude is noticeable especially in the shipments of fuel oil and heavy crude to the United States. The decline in such shipments from 1927 to 1929 nearly equalled the decline in heavy crude production. Heavy crude shipments to the United States dropped 8,501,796 bbls., while fuel oil shipments dropped 6,711,676 bbls., or a total of 15,213,472 bbls., as compared with a drop in heavy crude production of 18,760,177 bbls.

In a similar manner, the quantities of heavy crude and fuel oil delivered as bunker oil at Mexican ports have declined from 2,840,828 bbls. in 1927 to 1,136,956 bbls. during 1929. With Mexico's decline as a source of fuel oil and heavy crude used for fuel purposes and the manufacture of asphalt, the fuel oil supply of the United States has been augmented through increased receipts of crude and fuel oil from Venezuela and the Dutch West Indies.

Heavy Crude Output Less

Heavy crude oil production in the Tampico district declined from 38,973,551 bbls. in 1927 to 25,531,167 bbls. in 1928 and showed a further drop to 20,213,374 bbls. during 1929. Production of light crude in the Tuxpan district dropped from 22,430,039 bbls. in 1927 to 21,846,768 bbls. in 1928 and then declined sharply to 16,212,550 bbls. in 1929. The decline in Tuxpan light crude, however, was more than compensated for by increased production on the Isthmus of Tehuantapec, which advanced from 2,717,532 bbls. in 1927 to 2,772,877 bbls. in 1928 and then increased to 8,263,343 bbls. in 1929 as the result of new developments at Tonala.

The quantities of crude treated at Mexican refineries varied in accordance with the trends in production by districts. Decreased production in the Tampico and Tuxpan districts resulted in a drop in the amount of crude treated at Tampico refineries from 23,882,778 bbls. in 1928 to 17,639,695 bbls. in 1929, while the refinery on the Isthmus of Tehuantepec, in line with the increased crude production, increased refinery runs from 2,686,956 bbls. in 1928 to 6,044,954 bbls. in 1929. A continuation of the trend is indicated in production figures for the first four months of 1930, which show increased production of light crude and further decreases in heavy crude production.

A small quantity of imported crude also was treated at Mexican refineries during 1929, the refining of 428,500 bbls. resulting in the production of 366,304 bbls. of fuel oil, 16,492 bbls. of gas oil, 17,329 bbls. of kerosene, and 24,047 bbls. of gasoline. No foreign crude was treated at Mexican refineries during 1928, but a relatively large quantity was refined during 1927, when 4,758,857 bbls. were put through refineries and 4,140,575 bbls. of fuel oil and 404,258 bbls. of gasoline produced.

Production of natural gasoline in Mexico reached a total of 117,995 bbls. during 1929, as compared with 81,053 bbls. in 1928 and 84,671 bbls. in 1927. Plants operated during 1929 consisted of the Mexican Eagle Oil Co.'s plants at Francita, Naranjos and Agua Dulce; the Huasteca Petroleum Co.'s Cerro Azul plant, the Mexican Gulf Oil Co.'s plant at Toteco, and the Penn Mex Fuel Co.'s plant at Paso Real.

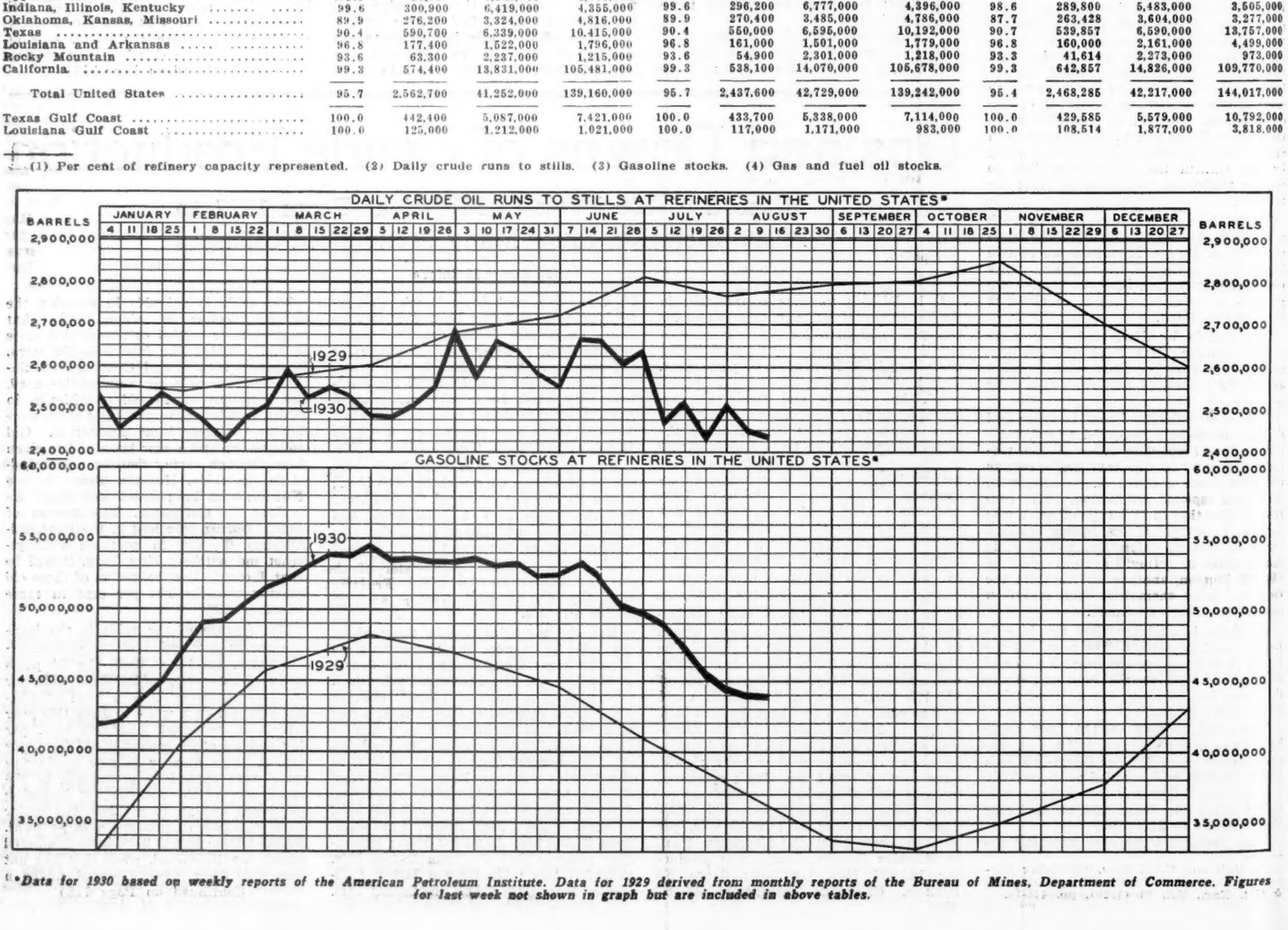
(Continued on Page 146)

AMERICAN PETROLEUM INSTITUTE WEEKLY REFINERY STATISTICS

The weekly report made to the American Petroleum Institute on refinery statistics—crude runs to stills, gasoline stocks and gas and fuel oil stocks in barrels—for the week ending August 16.

	Week ending August 16				Week ending August 9				Week ending January 4			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
East Coast	100.0	493,400	6,198,000	9,995,000	100.0	483,400	6,549,000	10,147,000	100.0	454,857	5,998,000	7,431,000
Appalachian	91.8	86,400	1,382,000	1,087,000	91.8	83,600	1,451,000	1,046,000	91.6	75,571	1,282,000	805,000
Indiana, Illinois, Kentucky	99.6	300,900	6,419,000	4,355,000	99.6	296,200	6,777,000	4,396,000	98.6	289,800	5,483,000	3,505,000
Oklahoma, Kansas, Missouri	89.9	276,200	3,324,000	4,816,000	89.9	270,400	3,485,000	4,786,000	87.7	263,428	3,604,000	3,277,000
Texas	90.4	590,700	6,339,000	10,415,000	90.4	550,000	6,595,000	10,192,000	90.7	539,857	6,590,000	13,757,000
Louisiana and Arkansas	96.8	177,400	1,522,000	1,796,000	96.8	161,000	1,501,000	1,779,000	96.8	160,000	2,161,000	4,499,000
Rocky Mountain	93.6	63,300	2,237,000	1,215,000	93.6	54,900	2,301,000	1,218,000	93.3	41,614	2,273,000	973,000
California	99.3	574,400	13,831,000	105,481,000	99.3	538,100	14,070,000	105,678,000	99.3	642,857	14,826,000	109,770,000
Total United States	95.7	2,562,700	41,252,000	139,160,000	95.7	2,437,600	42,729,000	139,242,000	95.4	2,468,285	42,217,000	144,017,000
Texas Gulf Coast	100.0	442,400	5,087,000	7,421,000	100.0	433,700	5,338,000	7,114,000	100.0	429,585	5,579,000	10,792,000
Louisiana Gulf Coast	100.0	125,000	1,212,000	1,021,000	100.0	117,000	1,171,000	983,000	100.0	108,514	1,877,000	3,818,000

(1) Per cent of refinery capacity represented. (2) Daily crude runs to stills. (3) Gasoline stocks. (4) Gas and fuel oil stocks.



Data for 1930 based on weekly reports of the American Petroleum Institute. Data for 1929 derived from monthly reports of the Bureau of Mines, Department of Commerce. Figures for last week not shown in graph but are included in above tables.

Beardsley Knows What Broke Means

Gas Company Treasurer Was Without Job, Money or Place to Sleep, but He Had Learned to Use His Wits While at College

By Thomas F. Smiley

Five uneasy young men, students in Allegheny College, Meadville, Pa., were before the faculty, threatened with suspension. They were accused—yea, convicted out of their own mouths—of having disgraced themselves and the college by violating the rule which forbids a student to give or receive aid in an examination. One of the culprits was Reed D. Beardsley, now treasurer of the Standard oil group of natural gas companies that have headquarters in Pittsburgh, Pa. He had not received aid, but—he had given it.

Reed, then a sophomore, had been approached privily by four classmates, each of whom confided his inability to face his coming examination in mathematics. Now a problem in calculus or trigonometry presented about as many difficulties to Reed as breaking out a string of drill pipe does to a driller. The four others had their strong points, but math was not one of them. Reed devised a scheme which for ingenuity and impudent daring must take high place in campus strategy.

The examination was held in the large chapel room and Prof. J. S. Trueman, who conducted it, seated the students far enough apart to discourage attempts at intercommunication, apparently precluding all chance of any of them tricking him. In accordance with custom, as each one finished his task he would leave the room, placing his examination papers on a table near the door.

It Would Have Fooled Anybody

When Reed nonchalantly walked out, pausing like the rest at the table, Professor Trueman was at the most distant place in the large room. This was purely accidental so far as the professor was concerned, but Reed's selection of that instant for passing out of the picture was craftily calculated. Following Reed, each with the wearied air of one who has labored long and earnestly, came the four who had held secret conference with him. Each stopped a moment at the table, his back toward the instructor, as if depositing his examination papers.

As a matter of fact Reed was the only one of the five who put anything on the table. He left five sets of examination papers, his own and one for each of the other conspirators. Before entering the room he had provided himself with the four different kinds of writing paper used by his fellow malefactors. Then he had made out five sets of papers, employing different pencils and different styles of handwriting.

In announcing the results of the examination Professor Trueman expressed gratification over the fact that some who had made poor showings in the classroom had done splendidly in the test. In their jubilation the students involved became careless and the facts leaked out. All were summoned before the faculty, headed by President David H. Wheeler. Prof. W. T. Dutton, another teacher of mathematics, saved them from punishment by pleading that there had been no moral turpitude, that all knew college examinations the world over were the occasion for a matching of wits between students and professors, that the whole thing was a prank and that the professor who had conducted the examination was as much to blame as anybody. A suspicion persists to this day that Professor Dutton, perhaps even the revered President Wheeler, chuckled secretly.

What, Again?

The feat seems to have served as advertising for Reed, for the next year four other classmates, juniors now, appealed to him for similar help. Could he outwit a watchful professor again? Well, he could try. His zest for adventure had been sharpened and he began to plan his campaign. All unconscious of the fact himself, Professor Dutton helped. It happened that one junior, to enable him to take advantage of a proffered job, was to receive his examination before the others. Professor Dutton said to Reed: "I'll give you your examination at the same time. That will remove all chance of your repeating your performance of last year."

"All right, Professor, if that will set your mind at rest," replied Reed with an air of resignation, but inwardly exulting.

Incidentally Professor Dutton had rallied Reed almost daily about the trick played the year before and the latter had come to feel that the professor in effect was defying him to try it again if he dared. Reed was accepting what he viewed as a challenge.

Professor Dutton's classroom was on the first floor of Bentley Hall. There was no basement under the room, but a small rectangular hole had been left in the stone foundation. On the night before the class examination Reed and his co-conspirators crawled through this hole and by the light of a lantern bored four small holes through the floor, one near each corner of the room above.

Really, This Looks Suspicious

The next day Reed's companions in the plot arrived early in the classroom and each occupied a seat near one of the holes, over which he kept a guarding foot. Reed himself, his own examination out of the way, crept beneath the floor again. Among cobwebs and old bottles he wriggled in the dank semidarkness to the nearest of the four holes. With a lead pencil he tapped the sole that covered it. The foot slid to one side. A beam of light shot through. Then a tightly rolled sheet of paper bearing the examination questions. The rest was fairly easy. Answers went to the four waiting students through the holes in the floor. Profiting by what had happened the year before, all kept their mouths closed this time until graduation diplomas were safely in hand.

This fragment of educational history culled from the gay nineties removes uncertainty concerning the value of college training. No wonder Mr. Beardsley rose in the natural gas industry. Of his four fellow strategists in the episode first described two are successful physicians, one in Pennsylvania and one in Washington. Another is an honored minister of the gospel. The fourth is Maj. Frederick Palmer, widely read author and the country's most distinguished war correspondent, who says in a reminiscent letter about the incident: "In mathematics I was what the students of today call perfectly dumb. I could get the liberal studies easily, however, which probably accounts for the fact that I took to words, rather than to engineering."

When Mr. Beardsley was confronted with the testimony concerning these episodes in his college life he grinned—gleefully if you must know the truth—and owned that it was true to the last detail. Both he and Major Palmer point out that the honor system which prevails in many colleges today was virtually unheard of 40 years ago. The examination was recognized by professor and student as largely a battle of wits. The student of that day if unable to pass an examination without help got the needed assistance if he could do it without being caught, and he suffered few twinges of conscience.

Teacher at 16

Of course a sketch of Mr. Beardsley's life must not omit some of the prosaic but historically important details. For instance he is informed, and he has no reason to question the assertion, that he was born in Mill Village, Erie County, Pennsylvania, in 1869. He attended the one-room district school there and at 16 received a certificate to teach. He taught country schools and at 18 he entered the preparatory school of Allegheny College. He graduated from the college in 1893 in the civil engineering course, paying his own way through. He earned much of the money needed by teaching. Some of it he got by serving as janitor of the old Stone Methodist Episcopal Church in Meadville and by similar professional service in a Meadville bank.

It is within the truth to say that it was the ever-present need of money that led Mr. Beardsley into the natural gas industry. He entered it with a pick and shovel in the spring of 1892, when finding himself without funds to pay for board, room, books, tuition, clothes, etc.—that is to say, busted—he dropped out of college until the next fall and got a job in a pipe line gang near Bradner, Ohio.

When Reed got his diploma in 1893 the country was in the grip of a severe industrial depression. Virtually no construction work was going on and he sought in vain for the job as a civil engineer which he had expected to find clamoring for him. Oh, well, he wasn't going to be particular. In August he got work in Chicago selling, or trying to sell, advertising space in a national magazine. He didn't need a secretary to help him keep track of his income, but he persuaded himself that two could subsist on it and in October he married Miss May Litzenberg, of Oil City, Pa., who had been a student in the Meadville Conservatory of Music while he was in college.

Something Always Has to Happen

Then, what do you think? The publishing house failed, leaving Reed in Chicago with a young wife and no job. In one month his total assets—liquid, frozen and otherwise—shriveled to exactly $11.

At this disturbing juncture Reed put his bride on a train for her old home. The day coach fare was $10.50. That left 50 cents, which he pressed into her hand to buy on the way the luxuries that every woman loves. Then he turned back to the city. No job. No place to sleep. Not a cent in his pockets. Suffering cats!

Reed had a slight acquaintance with a young dentist who had a small office in Chicago. To him he said: "Would you trust me with a key to your office, so that I could sleep on the couch here, removing myself each morning before you get around?"

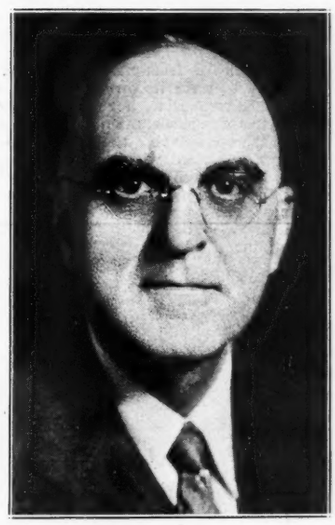
Yes, he would.

But food? A fellow's got to eat. Aha, an idea! This was back in the days when places with swinging doors occurred with great frequency in all cities and it was the era of the bounteous free lunch. Soup, bread, pretzels, cheese, meats, appetizing things of many kinds, sometimes with a white-aproned darky to serve them, were there for all who came. To be sure, you were expected to buy at least a glass of beer, but if you went out without buying—and obviously that was what Reed would have to do—they couldn't hang you for it. You could keep out of trouble and assuage the pangs of hunger at the same time by just being

(Continued on Page 76)

WHEN THE SHOE'S ON THE OTHER FOOT

The professor is not always the victim and the student the saucily triumphant wag in higher institutions of learning where petroleum engineers and others are said to acquire intellectual refinement and poise that insure a flying start on the road to success. College history, as many an oil man can testify, is peppered with incidents in which young men brought confusion upon themselves by overestimating their own brilliance in repartee or their cunning in classroom strategy and underrating the professor's. Illustrative of the manner in which the tables often are turned on the too self-confident student is an episode recounted by E. L. Mattern in his "Seventy Years of Friendships," concerning Dr. John Barker, once president of Allegheny College, the school from which Mr. Beardsley graduated. Doctor Barker's failing was a habit of being late in meeting his classes.



Reed D. Beardsley

"Watching their opportunity," says Mr. Mattern, "some of his students one morning placed an obliging dog in the empty professorial chair, with spectacles over the animal's nose. The whole class awaited his coming with repressed smiles. Finally the gentle and popular doctor arrived. Opening the door, he observed the scene set for his discomfiture. He simply said: 'Beg pardon, young gentlemen; I see that you are already provided with a teacher who is entirely competent for you,' closed the door and went away."

Odd Drilling in Bayous of Louisiana

Boilers, Mud Tanks and Storage Tanks Mounted on Barges. Field Storage on Piling Foundations in Water 8 Feet Deep

BATON ROUGE, La., Aug. 18.—Something different in operating practices for swamp and water located fields of southern Louisiana has been carried out very effectively by the Standard Oil Co. in the development of its salt dome at Bayou Blue, Iberville Parish. These practices have been called into play because of certain peculiarities of the field, which otherwise is of the typical swamp type.

Bayou Blue is one of the newer Gulf Coast fields. The dome was discovered with the seismograph by the Standard Oil Co. and Union Sulphur Co. in 1926, and was opened for production in September, 1929. The first development of the field was started by the Union Sulphur Co., which drilled one test, No. 1 Schwing, this being junked at 2,858 feet, in November, 1927. Drilling was then taken over by the Standard Oil Co., whose first test, No. 1 Wilbert, proved the dome by drilling into salt. It was drilled to a depth of 4,494 feet and was abandoned in August, 1928. Since then five additionals tests have been drilled, three of which have been producers.

The field is about 20 miles in an air line southwest of Baton Rouge and is in an area entirely covered by water from 6 to 8 feet deep. The only connection between it and the outside world is through Bayou Blue (from which the field gets its name), down the Grand River to Bayou Plaquemine, and up this bayou about 2 miles to a point where the Standard Oil Co. has established its base. The distance from the field to this base is about 12 miles by water.

At the time drilling was started on the dome by the Union Sulphur Co., Bayou Blue was dredged from its mouth at the Grand River to a point where a canal was dredged up to the dome, which is about a mile from Bayou Blue. About 4 miles of dredging was necessary. Large camp boats were then towed up to the location and used as quarters for the workmen.

Tanks on Barges

In the building of derricks at Bayou Blue it has not been practical to put them on a cribbing foundation as is done in some of the other swamp areas, but, instead, piling has been used entirely. Approximately 100 piles of 35 to 40-foot length are driven for the derrick, pipe rack and engine. This makes a very satisfactory foundation and is comparatively economical. Two hundred and fifty-barrel steel tanks have been used for slush or mud pits, which have been placed on sills and cribbed up just high enough to be safely above the surrounding water level.

One of the unusual practices of the Standard Oil Co. is that of setting up its boilers and fuel tanks on barges. The set-up consists of a barge with two boilers and one 500-bbl. fuel tank mounted upon it, and over the boilers a galvanized iron shed is built to protect them from the weather. As a precaution against fire, water vats are built into the barge, under the fire boxes of the boilers. The barge is then towed to the derrick and rig, wherever it may be, and anchored rigidly to the derrick piling, and after the connection of the steam lines to the drilling machinery, the boilers are ready for duty.

This set-up of boilers and fuel tanks, identical with the arrangement of any boiler house on land, provides the utmost in portability. When a well is completed and the rig is moved to another location, the steam lines are disconnected and the barge moved to the new location and hooked up as before without the loss of the head of steam built up on the previous job.

The use of these barges with boiler and fuel tanks set up permanently upon them is made possible by the stillness of the water in this particular area. Were the water running swiftly, as in the majority of southern Louisiana fields, the boilers would have to be set up on piling or cribbing each time used. Thus, Bayou Blue is one water field where the water is an important advantage in drilling operations, making the movement of some equipment even easier and more convenient than on dry locations.

Drilling Mud Problem

As in most of these southern Louisiana fields, the operators have found the providing of mud for drilling a serious problem. As the bed of this vast waterland is built up of alluvial soils, full of sand and grit, drilling mud must be hauled in from some outside place. Sometimes gumbo suitable for drilling mud can be found on a nearby ridge, but, generally, and this is the situation at Bayou Blue, the mud must be hauled many miles. This is a very expensive item in the cost of drilling but one from which there is no relief until the hole encounters a gumbo formation free from gritty substances, and is able to make its own mud.

At Bayou Blue, for the purpose of keeping a sufficient supply of mud on hand, two 500-bbl. tanks placed on a barge and filled with mud are towed to the location. As drilling progresses this mud is taken from the supply tanks and mixed in the slush pit. For some tests it is necessary to furnish mud for the entire drilling of the well. Other wells are capable of furnishing enough mud to fill all available storage.

Another unusual operating feature of this field is the method employed in working over the wells and in pulling rods and tubing. Pulling of rods and tubing is a frequent necessity in this area as the producing sand is so fine that it has been impossible to set a screen fine enough to keep the sand out and at the same time let the oil in. To furnish power to work over these wells a tractor with winch attachment is used. It is mounted rigidly on a good-sized barge and towed from one well to another as needed. The barge is firmly moored to the piling foundation of the well; a snatch block is then fastened to the floor of the derrick to guide the line from the winch to the crownblock of the derrick, and the rig is then ready for duty.

Camp at Bayou Blue. Picture was taken from a speed boat traveling at 30 miles an hour.

Derrick Within Derrick

Soon after the Standard's No. 2 Schwing came in as a producer, sand trouble developed which caused it to bridge over. It was necessary to run tools in the hole to remove the sand bridge to permit production to resume. A problem was faced here as the drilling rig and derrick used for the drilling of this well was needed on another location; and at the same time it was not advisable to let No. 2 Schwing stand sanded up any length of time. The problem was solved by the erection of an 85-foot derrick inside the 112-foot derrick with which the well was drilled. During this time there was no shutdown of work on the well and when the crownblock of the 85-foot derrick was put in place, the line was transferred quickly and operations continued with but slight interruption. The larger outside derrick then was removed, together with the drilling machinery, and taken to another location.

As development of Bayou Blue progressed the number of crews of workmen increased until the camp boats became inadequate. Also, the production was such that the Standard felt justified in constructing permanent quarters. These permanent quarters consist of two buildings. One of the buildings is divided into small rooms for the men to sleep in, each room accommodating two men. The building is long and narrow and the rooms extend the full width, permitting each room to have excellent light and ventilation. Screened porches on each side extend the full length of the building and are of sufficient width to allow ample lounging space.

In the second building are the kitchen, dining room, storeroom and office. The dining room is exceptionally large and well ventilated and can accommodate 50 men at one meal. The kitchen is operated by the Standard Oil Co. and excellent meals are served.

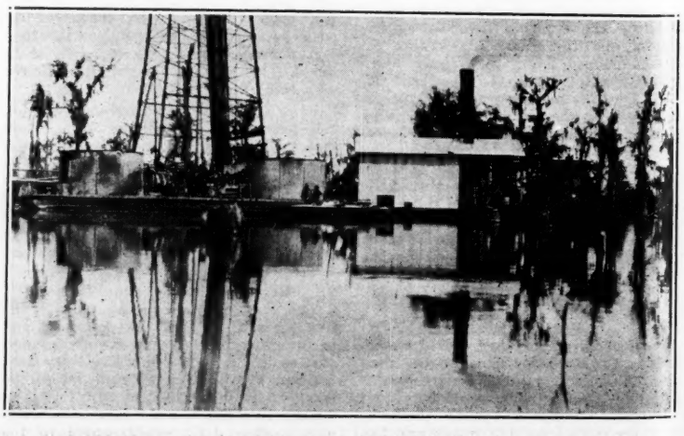
Camp on Piling

The entire camp is built upon a piling foundation, the buildings being of standard construction. An automatic electric generating plant provides light and power for the camp. A motor-driven, automatically controlled water pump provides water supply for the camp at a constant uniform pressure.

As previously stated, the company has established its base on Plaquemine Bayou some 12 miles distant from the field by

(Continued on Page 146)

Field storage at Bayou Blue Field built on piling foundation in water 8 feet deep.



View of Union Sulphur Co.'s No. 4 Schwing, showing boilers and fuel tanks mounted on barge to the right. Two rotary mud tanks are shown on left barge.

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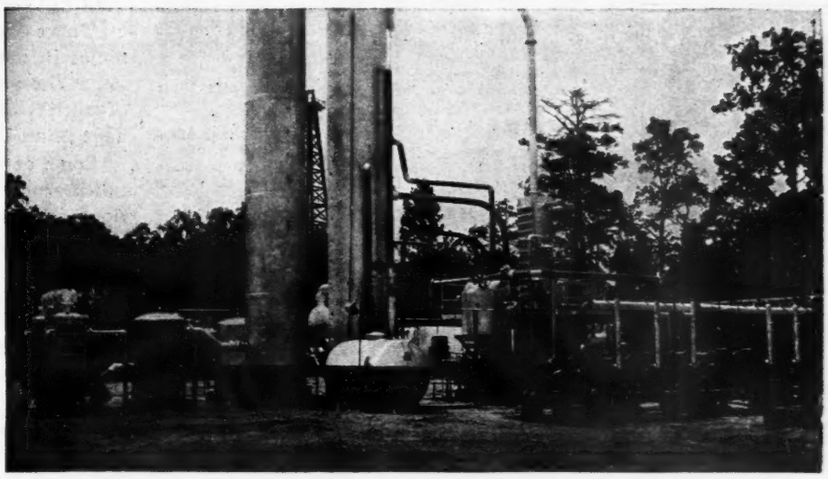

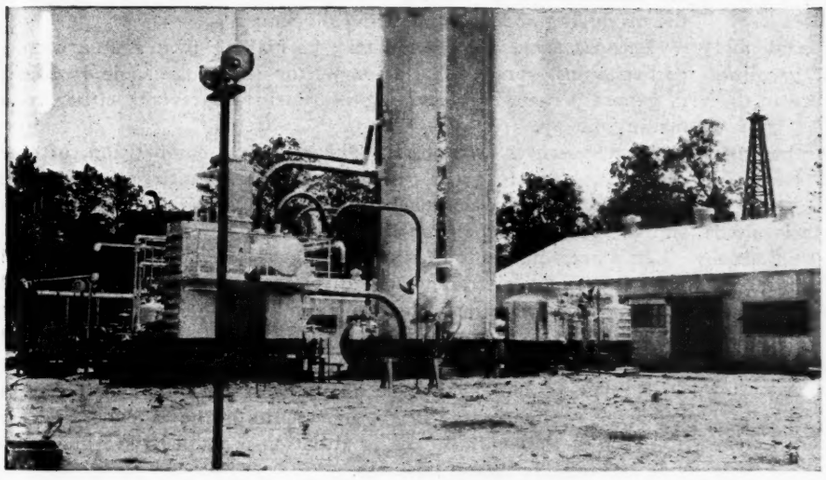

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114-116 West Second Street
TULSA, OKLA.

Established as an International Publication in 1910 by Patrick C. Boyle.

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THE COST OF DISTRIBUTION

Now that the industry has curtailed overproduction of crude and is making some headway in curtailing overproduction of gasoline, the next step should be towards curtailing overexpenditure in distribution costs.

Much of the money that can be saved through the two other curtailments will otherwise be thrown away in misguided sales expenses.

A striking example of overproduction of sales outlets is cited by The Oil and Gas Journal's Chicago correspondent in this issue, where no less than nine marketers are competing for the trade of one little community whose needs could be amply supplied by three stations.

So far from being welcomed by motorists as an added convenience the most common comment by car owners on a new station is why anyone ever thought of opening another station at that particular point when there were already so many others in the vicinity.

In view of the more than adequate service available to the public it is apparent that in most cases there is no idea of filling any long felt want.

There is not even any such pretense. The plain purpose is to get a share of whatever the gallonage may be without much consideration of whether it will be worth while when it is split.

This procedure is the natural outcome of the modern habit of thinking in terms of mass production and sales volume. The advantages of mass production are realizable only through expanded sales and these complementary efforts have so dominated the industrial and business world that in many cases they have been allowed to obscure the essential point of adequate profit.

One of the most notorious results has been the multiplication of sales outlets—the duplication of rival chain store sites, the scattering of sales franchises or agencies, so that the business was so divided it hampered any genuine sales effort and brought about conditions that reacted on the original proposition.

This contagious craze for volume of sales took the form of greed for gallonage in the gasoline business. Too much gasoline was being produced and there was corresponding pressure on the sales departments to dispose of it, another case of mass production and the necessity for sales volume.

Terms were so attractive that they invited new outlets, until they became too many and price cutting competition undermined the market. In an effort to save themselves integrated companies opened stations of their own, but continued overproduction showed that was not the remedy.

Overproduction caused this condition and it will take the elimination of overproduction to cure it. But a start may be made in the right direction by getting the industry to look at distribution from the right angle.

There are figures showing the total number of automotive vehicles in use in this country, and the average gallonage per year. What the gasoline industry needs is a survey showing the number of outlets and what their average gallonage is, not so much perhaps in a national total but in competitive areas.

Some of the big store chains, before selecting a site, have a detailed study made of the traffic passing it compared to other locations, weighing carefully one side of the street or one corner against the others, as well as many other phases. No one could suppose that any similar thought is ever given to the location of many of the filling stations which crowd one another at intersections or are located at the least likely sites just apparently because there was a vacant lot available.

It will doubtless be said that the prospective sales possibilities of every site are considered carefully before location, but the business actually being done and the fact that instead of one station doing a fair business two or three are barely making ends meet suggests a lack of judgment somewhere.

A scientific study of distribution costs, actual knowledge of the limits of the potential sales gallonage in a given area, should act as a deterrent against this unnecessary duplication and multiplication of stations which is costing the industry dividends hard earned in the producing and manufacturing divisions.

Because some one station may be making money at a certain corner is no assurance that a competitor can do the same, in fact it is generally true that dividing the business prevents either from making money.

That, however, is not all. The resulting competition, oftener than not, leads to price cutting and other additional sales costs which further ruin the market at that particular spot and lead to similar ruinous competition elsewhere, affecting the general market.

As a prerequisite to the establishing of a new outlet there should be at least a definite knowledge of what gallonage will be required to justify the investment and the maintenance of the station. Next whether there is that much gallonage procurable at fair prices and without competitive losses.

It may be said again that this is usually done, but it may be answered again that the marketing results do not show it and the evidence of the overbuilt outlet situation is plain to everybody inside and outside the oil business.

The impulse to increase outlets in the hope of increasing sales is of course natural. It can be seen in every business, although carried in none to the extreme in the gasoline business.

The position of the integrated companies can be easily understood, but their increase in stations, with general overproduction of gasoline offering attractive inducements to others to enter the business, inevitably leads to further competition. In turn this breeds sharper rivalry entailing greater costs, either in direct sacrifice of prices, increase of services, rebates or concessions of one kind or another.

All this must be figured as excessive cost in distribution, from the establishment of unnecessary outlets to the losses sustained in the resulting competition and demoralization of the general market.

Overproduction, with its demand for sales, is of course primarily responsible, but the consideration of the actual cost of distribution would have forced a showdown long before this. Now that missing profits are being traced to excessive distribution expenditures there is hope of a return to first principles with sales being judged upon returns and not upon mere volume.

The industry has come to see that it was losing money by overproduction of crude and overproduction of gasoline. It is beginning to see that it is also losing money by overcostly distributive methods and that the true test of successful business is not size but profit.

Here is another example of how Dresser Couplings speed up difficult laying jobs. This 208-mile 18-inch gas line went from Louisiana to Memphis in 92 days — across fields, gumbo, swamps, rivers, railroads, canals, ditches and bayous. Dressers are standard for long-distance lines because they make the quickest, tightest and most flexible joints—least expensive to maintain. They remain permanently tight.

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Cracking Process for Small Refinery

Dubbs Unit at Canton, Ohio, Refinery Operating With Flash System Incorporates All Features of Major Plants

By C. O. Willson

The cracking process at the Canton, Ohio, refinery of the Allegheny-Arrow Oil Co. is an illustration of what can be done in the design of a plant to meet the requirements of a small refinery. The process with a rated capacity of 600 bbls. daily takes care of the charging stock available from the Skimming plant operation.

Although the capacity is approximately one-fifth that of some new units at larger refineries, the Allegheny-Arrow plant incorporates all of the latest development in Dubbs equipment extending from a new type furnace to the automatic control features which have greatly simplified the Dubbs operation.

The management of the Allegheny-Arrow company decided a commercial grade of fuel oil as a residuum from the cracking still would best suit their market requirements, so the operation is based on the flash method. The main features of this operation which are shown in the accompanying flow chart do not differ materially from other Dubbs stills using the flash system. The owners and licensors of the process through experience gained at other installations have been able to perfect minor details, such as pumping operation, control of overhead and residuum products, gas separation, heat exchange and other features which have made the entire operation comparable in simplicity with the crude still operation.

SECOND ARTICLE

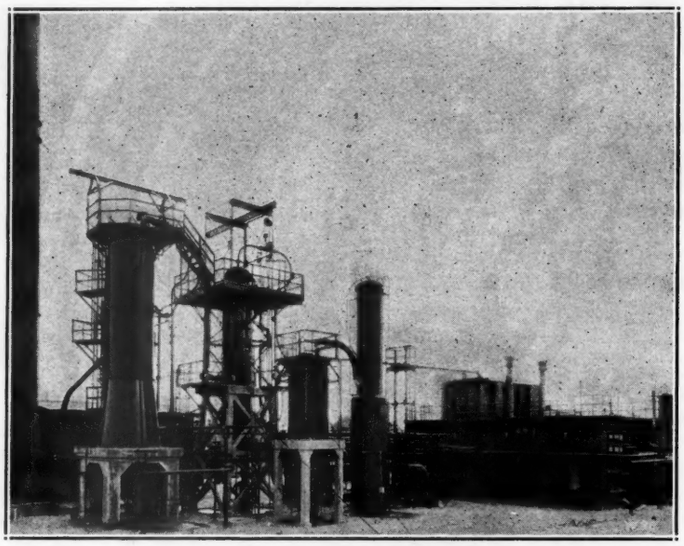
The accompanying article is the second describing new equipment at the Canton, Ohio, refinery of the Allegheny-Arrow Oil Co. The first article appeared in the August 14 issue, page 40.

Starting with a pump in the receiver house the raw oil is first charged to the top and bottom of the flash dephlegmator, which is 3' 6"x16' 0". Valves on these two lines control the quantities passing to the flash dephlegmator, sufficient raw oil being fed over the top to condense the heavy ends in the flashed vapors permitting a satisfactory light vapor to pass over to the flashed distillate condenser.

The fresh stock mixed with the heavy condensate falls to the surge section at the base of the flash dephlegmator. At the base of the surge section the hot feed pump takes suction.

The rate of flow from the hot feed pump is controlled by the liquid level control on the surge section, a constant level being maintained in the latter which is 5'x7'. As shown in the chart, the hot feed pump discharges into the center of the main dephlegmator. The charge is further preheated at this point by coming in contact with the hot vapors from the reaction chamber. The heavy ends of the vapors are condensed by coming in contact with the hot feed and all of the liquid then falls in fine streams over the pans of the dephlegmator to the bottom. For the purpose of controlling the endpoint of the vapors taken overhead, a small fraction of pressure distillate is circulated at the top of the dephlegmator by means of a small pump. This assures a uniform pressure distillate from the cracking operation.

The hot oil in the bottom of the dephlegmator is picked up by a Dow hot oil pump and charged direct to the furnace tubes. The furnace design is one of the most interesting features of the entire plant and will be described later.



General view of background of Dubbs unit, left, stack and furnace; foreground, left to right, reaction chamber, dephlegmator, flash chamber, flash dephlegmator, receiver house.

Pressure Distillate

From the heating tubes the liquid which has been brought to the cracking temperature, passes through a transfer line and a ball check valve, discharging at the top of the reaction chamber, which is 5'x25'x1½" thick. The vapors pass to the main dephlegmator where, as previously explained, the heavy ends are condensed out through contact with the incoming liquid charge. The light vapors from the dephlegmator pass to the condensers and from there to the pressure distillate receiver.

The latter is maintained at high pressure and dry gases are automatically released to the gas burner system. The pressure distillate is withdrawn from the receiver through a meter and liquid level control valve which controls the flow to the gas separating tank. In the gas separating tank release of noncondensable gas takes place at a reduced pressure of 30 pounds, the gas passing to gas absorption plant where the gasoline fractions are removed.

Disposal of Residuum

The liquid which is not vaporized in the reaction chamber falls to the bottom of the chamber and is removed from the system by means of a residuum drawoff line. A uniform liquid level is maintained in the bottom of the chamber to prevent vapors being removed. The residuum is withdrawn to the flash chamber previously mentioned. There, atmospheric conditions prevail in regard to pressure. A large part of the liquid vaporizes and passes to the flash dephlegmator, where the heavier fractions are liquefied through contact with charging stock. The vapors are condensed and constitute a light distillate cut while the condensate becomes a part of the charging stock.

In the flash chamber the heaviest fraction settles to the bottom and is withdrawn by a hot residuum pump. This residuum has gravity of 9° A.P.I. and is sold as fuel oil. This fuel shows a b.s. content of less than .3 per cent using benzol as a diluent.

Safety Factors

The unit is designed so that the heating tubes in the furnace can be isolated from the remainder of the operation. By opening a valve shown in the diagram, the oil in the tubes can be drained through an emergency drain line. At the same time the ball check valve in the transfer line prevents the back flow of vapors from the reaction chamber. Thus shutting down the hot oil pump and closing the valve in the suction line to the oil pump prevents oil from entering the tubes from this source.

Unique Furnace Design

The Universal Oil Products Co., owner of the Dubbs process, realizing the great importance of furnace operation in the general efficiency of cracking, has done considerable research work resulting in constant improvement in design.

The furnace at the Allegheny-Arrow refinery, the main features of which are shown in the accompanying diagram, was adapted to the special requirements of the Canton refinery and includes all the features of the larger furnaces.

The rated capacity of the furnace is 7,000,000 B.t.u. of heat input into the oil per hour or slightly over 11,000,000 B.t.u. per hour heat generated from the fuel.

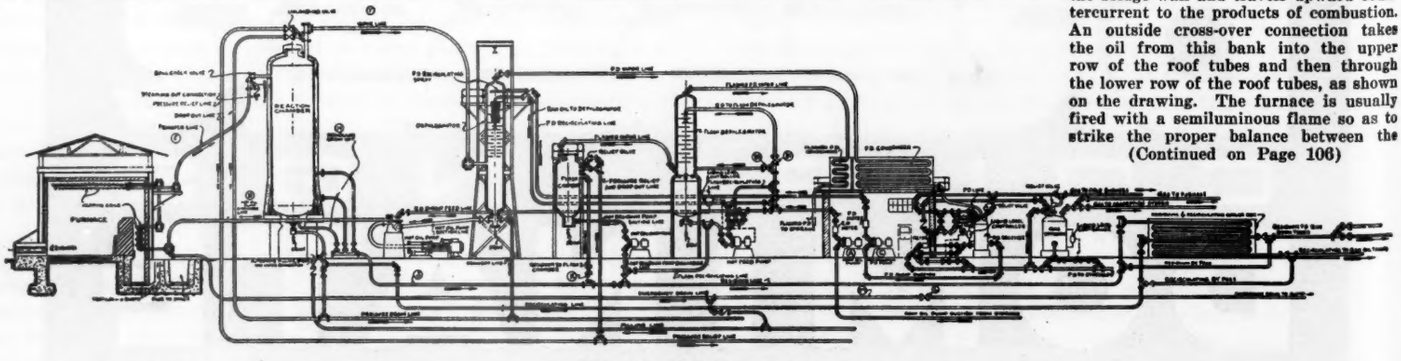
The furnace is 26 feet long, 22 feet 6 inches wide and 15 feet high on the outside. It has a total of 61 4" O.D.x24' long tubes, 41 of which are primarily radiant heat tubes located in two rows along the roof over the combustion chamber. Twenty tubes are located behind the bridge wall in a narrow bank and are primarily fluid heat tubes.

The furnace walls are built of first quality firebricks, 13½ inches thick with 4 inches of block insulation. Transite board three-eighths inch thick is used on the outside of the furnace. The arch of the furnace and the roof tubes are suspended from the steel work outside of the brickwork so that the brickwork of the walls is not subjected to any strain due to superimposed weight. To stabilize the wall refractories, fire brick tie blocks tied into the outside steel work are built into the walls.

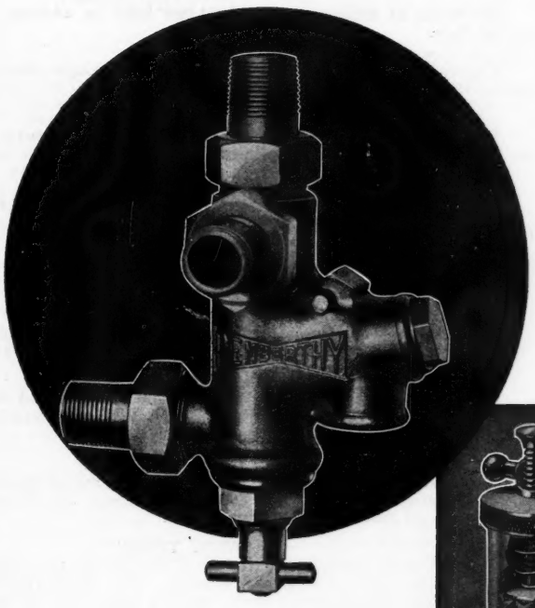
The walls and the floor of the underground flues are laid up with second quality fire brick. The top of the flues is covered with steel plates, insulated on the inside with insulating concrete. The foundations of the furnace proper and the underground flues are air cooled to prevent disintegration of the concrete and the baking of the soil around the foundations. The furnace is fired with either oil, gas, or both through Dutch ovens.

The oil enters the coil of the furnace at the bottom of the tube bank behind the bridge wall and travels upward countercurrent to the products of combustion. An outside cross-over connection takes the oil from this bank into the upper row of the roof tubes and then through the lower row of the roof tubes, as shown on the drawing. The furnace is usually fired with a semiluminous flame so as to strike the proper balance between the

(Continued on Page 106)

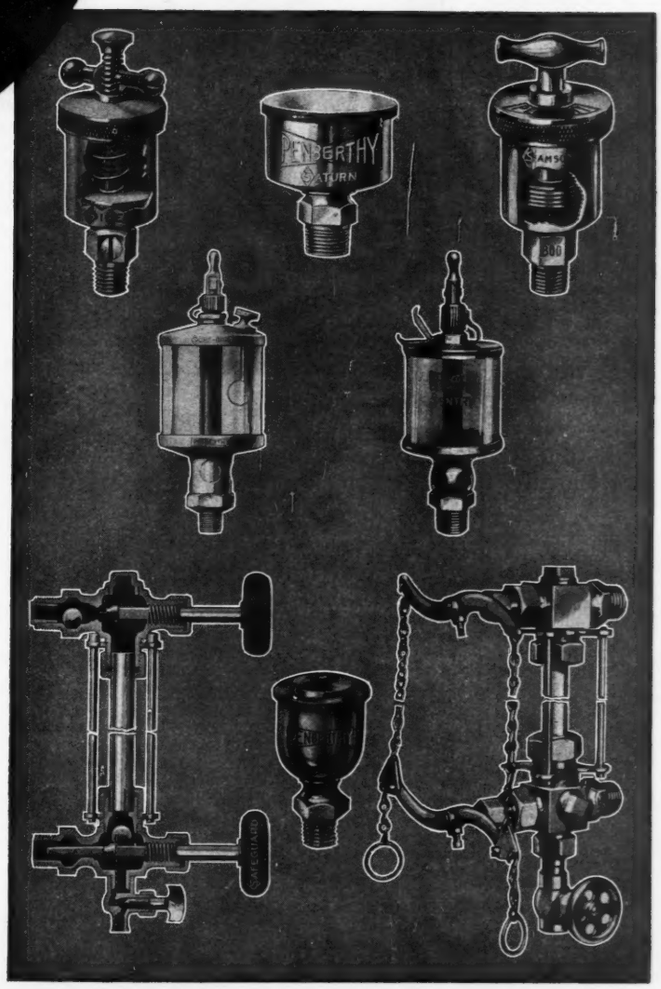


Flow chart of Dubbs operation.



ECONOMY SUGGESTS

PENBERTHY PRODUCTS



THE fact that such a large number of operating organizations in the "Close Buyer" class have for years used only these injectors, liquid level gages and lubricating devices, is significant of the fundamental economy of Penberthy Products.

These Penberthy Products are cast from new brass . . . not made from spun or stamped brass. The design and workmanship allow for the rough handling that is probable.

Penberthy Products are carried in stock by supply companies everywhere.

PENBERTHY INJECTOR COMPANY

ESTABLISHED IN 1886 DETROIT CANADIAN PLANT, WINDSOR, ONT.

DEATH TAKES THOMAS B. SLICK, NOTED PRODUCER AND WILDCATTER

Thomas B. Slick, one of petroleum industry's outstanding wildcatters and oil producers, died in Johns Hopkins Hospital in Baltimore, Md., Saturday morning, August 16. Cerebral hemmorhage was given as the immediate cause of death, but he had been in ill health for several months and had been a patient in Johns Hopkins Hospital since June. Mrs. Slick and three sons survive. The funeral was held in Clarion, Pa., Mr. Slick's birthplace, on Monday, August 18, and was attended by many friends of the dead man, some of whom went to Clarion from the Mid-Continent fields by airplane.

Thomas B. Slick was only 46 years of age at the time of his death but the events of his life since attaining young manhood were so many and varied that it could be said he crowded a century of work into a quarter of a century of time. In the past 18 years he made and lost several fortunes. He operated in dozens of fields in half a dozen states. He was classed with the few other great wildcatters of the past 50 years, Joe Guffey, John Galey, Theodore N. Barnsdall and A. E. Humphreys, who preceded Mr. Slick in death after having made remarkable records as discoverers of oil and gas fields. Tom Slick, financially, was the most successful of this small galaxy of great wildcatters.

A Multimillionaire

At the time of his death Mr. Slick's fortune was rated high in the millions and the potential production of wells in which he was financially interested was believed to exceed 100,000 bbls. per day. His largest producing interest lay in the Oklahoma City Field where he was sole or part owner of 39 producing wells and 52 drilling wells. He was interested in Kansas as a member of the firm of Slick, Pryor & Lockhart in producing leases

Thomas B. Slick

in McPherson, Russell and Rice Counties and in wildcat drilling wells in those counties and in Barton, Sumner, Coffey and Kingman Counties. Following the opening of deep sand production in the Graham Pool in Young County, Texas, Mr. Slick entered that area and purchased the holdings of Pitzer & West and recently he plunged into the big leasing campaign in Southwest Texas acquiring large interests in the Darst Creek area and other parts of that big Southwest territory. Whatever Mr. Slick had in the way of production at the time of his death he acquired in the last 16

(Continuing on Page 148)

OIL MAN'S CALENDAR

AUGUST

26-28 — Chicago, National Air Races.

SEPTEMBER

2-4—Toronto, Ontario, North American Gas Tax Conference, King Edward Hotel.

4-5—Southwestern district, A.P.I. Division of Production, Buccaneer Hotel, Galveston, Tex.

8-12—Cincinnati, Ohio, eightieth meeting, American Chemical Society, Hotel Gibson.

17—Columbus, Ohio, Ohio Petroleum Marketers Association, Deshler-Wallick Hotel.

17-19—Atlantic City, N. J., National Petroleum Association, Hotel Traymore.

29-Oct. 4—Pittsburgh, Pa., Petroleum Section, National Safety Council.

OCTOBER

3—Tulsa, Okla., Board of Directors, American Petroleum Institute, Mayo Hotel.

4-11—Tulsa, Okla., International Petroleum Exposition and Congress.

6-11—Washington, D. C., sixth International Road Congress.

6-11—Washington, D. C., Exhibition, American Roadbuilders Association.

13-17 — Atlantic City, N. J., American Gas Association, Auditorium.

14-16—Kansas City, Mo., Convention, Big Four State Jobbers.

16-25—London, England, Olympia Motor Show.

20-22—St. Louis, Mo., Petroleum Refiners division, National Association of Credit Men.

22-24 — Pittsburgh, Pa., transportation meeting, Society of Automotive Engineers.

NOVEMBER

2-5—St. Louis, Mo., Marketing Congress, Independent Oil Men of America, Statler Hotel.

6-11—Berlin, Germany, International Automobile Show.

10-13—Chicago, eleventh annual meeting, American Petroleum Institute, Stevens Hotel.

DECEMBER

1-5—Memphis, Tenn., ninth annual Asphalt Paving Conference, the Asphalt Institute and Association of Asphalt Paving Technologists.

JANUARY

3-10—New York, National Automobile Show.

24-31—Chicago, National Automobile Show.

UNIFORM SYSTEM OF ACCOUNTS

The standardized or uniform system of accounts for the oil industry, as approved by the board of directors of the American Petroleum Institute, with all revisions to December 31,1929, of the Committee on Uniform Methods of Oil Accounting, is now in proof form and about ready to be printed as an institute bulletin. It contains the General Balance Sheet, with Chart of Accounts and text; Chart of Fixed (Capital) Assets and Reserve Accounts relating thereto, with text; General Income Account and Earned Surplus Analysis with text; and Chart of Income and Cost and Expense Accounts, with text.

MEXICO'S PRODUCTION

NEW YORK, Aug. 16.—July production of crude petroleum in Mexico amounted to 3,436,516 bbls., an average of 110,855 bbls. per day, according to a compilation by the Mexican Ministry of Industry, Commerce and Labor. This compares with June production of 3,286,802 bbls., according to revised figures of the same authority.

The commercial value of the July production, according to the ministry, was $3,023,926, against a valuation of $3,353,793 for the June output.

High Spots in Field News

EAST CENTRAL TEXAS

Pure Oil Co. announces 20 more locations in Van Pool.

ROCKY MOUNTAIN AREA

Six wells at Hobbs produced 81,068 bbls. in 24-hour test. One makes 21,496 bbls.

KANSAS

Kansas production holding steady. Eastborough discovery to be deepened. Rice County has 5,000-bbl. well.

SOUTHWEST TEXAS

Proration in effect in Darst Creek. Pettus operators favor curtailment to 7,500 bbls. fearing cut in prices.

NORTH LOUISIANA-ARKANSAS

Zwolle extension gets 1,200-bbl. well. Third producer in Urbana district. Large shallow gasser in Pope County.

NORTH TEXAS AND PANHANDLE

New area opened in southern Young County by rank wildcat. Another new pool or extension indicated in Young County.

GULF COAST

Deepest test on Gulf Coast, well of The Texas Company in Acadia Parish abandoned at 8,730 feet. Barbers Hill has good well.

OKLAHOMA

Five new wells completed in Oklahoma City Field August 18. Indian Territory Illuminating Oil Co.'s No. 3 H. W. Jones was largest completion, making 15,885 bbls. first 18 hours.

CALIFORNIA

Associated Oil Co. finishes well in north dome of Kettleman Hills on fee acreage outside territory covered by agreement and flowing 3,300 bbls. of 55 gravity oil and 70,000,000 feet of gas.

WEST TEXAS

Ector County well, estimated at 50,000,000 feet of gas, adds to interest over Fuhrman well in Andrews County. Penn Pool registers its best well, gauging 2,250 bbls. flowing wide open 12 hours and 12 hours on 61-64 inch choke.

Late Fields

CALIFORNIA

LOS ANGELES, Calif., Aug. 19.—Associated Oil Co. has finished No. 1 Whepley in North Dome of Kettleman Hills flowing 3,300 bbls. of clean 55 gravity oil and 70,000,000 feet of natural gas per day from 7,904 feet. This new well, located in Section 35-21s-17e from Mount Diablo base and meridian, is situated on fee acreage outside of the area covered by the existing Kettleman Hills agreement and will therefore not have to be shut in. It is flowing through three 1½ inch beans under a pressure of 600 pounds on the tubing and 1,200 pounds on the casing.

NEW MEXICO

FORT WORTH, Tex., Aug. 19.—Tidal Oil Co.'s No. 1 Coleman, Section 17-21s-36, Lea County, New Mexico, is shut down at 3,974 feet, swabbing after oil was encountered at 3,947-51 feet and 3,958-74 feet. It was bailed for 6 hours, the bailer encountering sulphur water at bottom; 2,000 feet of fluid stood in the hole before swabbing commenced.

KANSAS

R. C. Pratt and others' No. 1, NE cor. Section 34-16-6, Morris County, Kansas, a wildcat, is spudding. The test will be drilled to the Simpson sand horizon.

The Deep Rock Oil & Refining Co. and others have announced a new location for a wildcat test in the NE cor. Section 27-20-18w, Pawnee County.

Skelly Oil Co., Empire Oil & Refining Co. and others have staked a new location for No. 1 Weigle, NE cor. NW. Section 13-15-16w, in the southeastern part of Ellis County.

Empire Oil & Refining Co. is starting the second well in the new producing area, 4 miles west of Russell, in Russell County. The test is No. 2 Dillner, NE cor. Section 35-13-15w, the west offset to the discovery well, which is a Silicious lime producer making about 100 bbls. a day.

The deepest drilling test in Kansas is Watchorn Oil & Gas Co.'s No. 2 Morrison, NW cor. NE, Section 20-32-21w. It was drilling at 6,625 feet on the report of August 16.

Aladdin Petroleum Corp.'s No. 1, in the NW cor. NE, Section 28-20-10w, a half mile south of the Schurr Pool, in Rice County, had sulphur water at 3,320-21 feet. It is believed to be coming from the Silicious lime. It is the first dry hole within a radius of a mile of production in the Schurr Pool.

Shell Petroleum Corp., Tatlock and others' No. 1 Ploog, Section 33-18-9w, a wildcat in Rice County, is shut in. Approximately 5,700 bbls. of tankage on the lease is full. The well was flowing about 30 bbls. an hour when shut in, from the Silicious lime at 3,249-53 feet.

OKLAHOMA

Five new wells were completed in the Oklahoma City Field on August 18. An-

(Continued on Page 150)

SCORE CARD ON OIL PRODUCTION

Below is shown allotted average daily production in the United States April to December, inclusive, suggested by the Committee on Economics of the Federal Oil Conservation Board, and the actual daily average production during the week ending August 16:

	Allotted (bbls.)	Actual (bbls.)	Over (bbls.)	Under (bbls.)
California	610,000	616,000	6,000	.....
Oklahoma	655,000	537,755	.....	117,245
Texas	750,000	833,639	83,639	.....
Other fields	480,000	465,611	.....	14,389
Total	2,495,000	2,453,005	89,639	131,634

Net underproduction 41,995 bbls.

Will Extend Oklahoma City Proration

Potential Continues to Grow and Curtailment Plan May Have to Be Changed in Fourth Quarter. Seminole Output Up

By W. A. Spinney
Staff Correspondent, Oklahoma Fields

The production of Oklahoma registered a large decline for the week ending August 16, when the State averaged approximately 537,400 bbls. a day. It brings production about 13,000 bbls. a day under the estimated requirements which were placed at 550,000 bbls. daily by the pipe line companies.

C. C. Julian Oil & Royalty Co. has violated the State's proration order by refusing to shut in its No. 1 Community, in Section 14-11-3w, Oklahoma City Field, according to statements of operators. Otto Bradford, the field umpire, after the well had produced 24 hours, notified the company to shut the well in but it is alleged the company failed to do so. Citing the alleged violation of the State curtailment plan a suit for receivership may be filed in Oklahoma County district court. It is alleged the C. C. Julian company's action amounts to contempt of the State Corporation Commission. The suit will proceed on the theory that the rules and orders were fixed to prevent waste and the company's failure to comply with these orders makes it liable to a receivership. The case will offer the real test of the law. The well is located on a 4-acre tract near the city limits.

Another small fire was in progress in the Oklahoma City Pool Friday, August 15. Hall & Briscoe and others' No. 3 Holmes, NE cor. NW SE, Section 14-11-3w, caught fire when it blew in. The explosion caused considerable excitement, but within 10 minutes after the well had caught fire the crew succeeded in reaching the master gate and extinguishing the blaze. The production of the well was estimated at 15,000 bbls. a day and 50,000,000 feet of gas.

Meet to Extend Curtailment

Operators in the Oklahoma City Pool will meet there August 21 to consider an extension of proration for another 90 days, from September 1. The curtailment may be made more stringent, as the pipe line companies are unable to take more oil from the field than at present and the potential production continues to increase. Some operators in the field believe the Oklahoma City Pool is being curtailed more than the other pools in the state, since the allowed production percentage is smaller than in any other field. A meeting of operators was held August 13, and the suggestion was made that curtailment be changed from the time plan to the volume plan and that the field be put on a gas-oil ratio of 1,500 feet of gas per barrel of oil. This suggestion will be made to the Oklahoma Corporation Commission at the next meeting. The potential production of the Oklahoma City Field is estimated to be around 1,700,000 bbls. a day for a one-day gauge.

Salt Water Breaks In

Salt water made its appearance in two new wells in the Oklahoma City Field during the week. One of the wells was in the north end of the pool and the other in the northwestern part of the field. It is believed the water was the result of drilling too deep.

On the north edge of the pool, Wirt Franklin Petroleum Corp.'s No. 2 Minnie Page, SW cor. SE, Section 35-12-3w, was bailed in through a sand and mud trap. The first hour's production was 460 bbls. of fluid of which 60 per cent was salt water. The total depth of the well is 6,581 feet, in sand. The well was shut in after the first hour and an attempt will be made to plug back to shut off the water.

Marco Oil Co.'s first well in the field was No. 1 Holder, SE cor. SW, Section 2-11-3w, in the north end of the pool. The well flowed 435 bbls. of fluid the first hour, 90 per cent of which was water. The total depth of the well is 6,586 feet, in the Simpson sand, with the casing cemented at 6,170 feet. It is believed the well will be plugged back to shut off part of the water. The gas volume is estimated at 50,000,000 feet.

First Producer in City

The first producer inside the city limits was completed during the week. Tom Slick Oil Co.'s No. 1 Frost Heights, NW cor. SE SE, Section 14-11-2w, near Hall & Briscoe's No. 1 Holmes, which extended the production a mile west. The well made 809 bbls. the first three hours, and 3,927 bbls. the first 20 hours. It was completed through a sand and mud trap and was under control at all times, which prevented spray damage to nearby property.

A pair of small wells were added to the field the last part of the week. Tom Slick Oil Co., Aladdin Petroleum Co. and Phillips Petroleum Co.'s No. 2 Page, NE cor. NW, Section 14-11-3w, made 1,090 bbls. the first five hours. The gas volume was estimated at 9,000,000 feet. The total depth of the well is 6,269 feet, in Simpson sand. The other well was Indian Territory Illuminating Oil Co.'s No. 1 Hemmer, NW cor. SW, Section 11-11-3w, which made 40 bbls. of oil the first hour and 1,340 bbls. in 18 hours.

One of the largest gas and oil wells yet found in the north end of the field was the Century Petroleum Co.'s No. 1 Wyatt, C NE NW NW, Section 2-11-3w, which extended production another quarter of a mile north and west in the northern end of the pool. The huge gas volume estimated at 200,000,000 feet, threw a stream of oil over the crown block before the oil was turned into the separators. It was shut in for several days and then opened for production when it made 475 bbls. of oil the first hour and 1,550 bbls. in five hours. It was again shut in when the sand began cutting connections. The volume of gas in this well is the largest found in the north end of the pool. Total depth is 6,553 feet, in Simpson sand. Earlier completions in Section 2-11-3w, have shown less than 5,000 bbls. initial production with a large gas volume.

Indian Territory Illuminating Oil Co.'s No. 4 Ferndale Community, NE cor. NW NE, Section 11-11-3w, flowed 1,198 bbls. the first hour, and 5,966 bbls. the first 5 hours and 15 minutes, and was then shut in. The total depth of the well is 6,580 feet, in Simpson sand. The gas volume is estimated at 30,000,000 feet. It was completed by the washing-in method.

Coline Oil Co.'s No. 16 Clauer, SE cor. NW SE, Section 25-11-3w, in the south end of the field, was bailed down and was shut in. The gas volume was estimated at 30,000,000 feet and the oil at 1,500 bbls. a day. The total depth is 6,397 feet. The well was opened for a production test the next day and made 168 bbls. in 16 hours. It may be drilled deeper.

The wildcat test in the northern part of Oklahoma County, west of Edmond, the Mid-Kansas Oil & Gas Co. and Ramsey Petroleum Co.'s No. 1 Messer, SW cor. Section 32-14-3w, was bailed to the bottom of the hole at 6,346 feet, with nothing showing. The crew were rigging up to drill deeper.

The Oklahoma City Pool was back on normal production at 7 a.m. Wednesday, August 13. The previous three days all the producing wells in the field were shut in to allow the under-produced wells to make the full 24-hour gauge and the new wells to be completed. The field has approximately 800,000 bbls. of oil in field storage. This storage was reduced during the week ending August 11. The total production for the week was 485,640 bbls. and the pipe lines and tank car shipments were 654,633 bbls. The pipe line companies have agreed to take approximately 85,000 bbls. a day from the field.

Independent Oil & Gas Co. and others' No. 1 Hatcher, SE cor. NE NE Section 2-11-3w, in the north end of the pool, made 1,080 bbls. the first four hours and the gas volume was estimated at 10,000,000 feet. The total depth of the well is 6,498 feet, in Simpson sand. The well extended production a half mile north and the same distance west, bringing production within a few hundred feet of the city limits.

The completion of the Tom Slick Oil Co. and others' No. 1 Alexander, SE cor. NE SW Section 2-11-3w, which flowed 250 bbls. the first hour and 80 bbls the second when it bridged and was shut in, caused the Frisco railroad train to be delayed for about 15 minutes when the well was flowing into the air. It is the first time that a train has been delayed along the right of way in the north end of the field because of the fire hazard.

Cromwell-Franklin Oil Co.'s No. 27 Trosper Park, SE cor. SW SW Section 12-11-3w, was completed as the twenty-fifth producer on the city-owned property. The well flowed 187 bbls. the first 12 minutes and was shut in when sand started cutting the connections. The gas is estimated at 25,000,000 feet. The total depth of the well is 6,390 feet.

Indian Territory Illuminating Oil Co.'s No. 2 Pasadena Heights, NE cor. SW SE Section 14-11-3w, was completed and shut in after bailing down 2,000 feet. The total depth of the well is 6,559 feet. The well was shut in to prevent spraying adjoining property. It will be completed later in the week.

Canadian County's Big Lease Play

Tom Slick Oil Co. has taken over the J. V. Bailey block of about 10,000 acres and rig at No. 1 Robinson, NE cor. NW, Section 1-10-6w, Canadian County, which was built about two years ago but never started drilling operations. The test is located in the southern part of the county and is about 20 miles west of the Oklahoma City Pool. The company has been clearing up titles and expects to start operations in the near future. Another test, drilled about two years ago by Ramsey Petroleum Co., in the SE cor. NE, Section 28-11-5w, was abandoned at approximately 4,500 feet. Canadian County has shared very largely in the lease play of the last year and a half. The Indian Territory Illuminating Oil Co. has a block in northern part of Township 12-7w, consisting of about 10,000 acres and another block of nine sections in Township 13-10w, Tom Slick Oil Co. has a block in the northeastern part of Township 11-5w, and 11-6w, and another block in Township 13-5w. Sunray Oil Corp. has a block in central part of Township 14-8w. Reserve Petroleum Co. has an 8-section block in Township 14-7w, and another in Township 10-5w. The only deep test in Canadian County was drilled by the Ramsey Petroleum Corp., in Section 30-12-7w, to approximately 6,000 feet. It found a few showings of oil and gas and was abandoned.

Kay County

Two new areas were showing oil and gas in the western part of Kay County. The wells found the pay horizons in deep formations. Some express the opinion that two new pools have been found in Kay County. The Alco Royalty Co.'s No. 1 Wolfe, SE cor. SW SE, Section 34-26-2w, northwest of the Tonkawa

(Continued on Page 74)

WILDCAT OPERATIONS IN OKLAHOMA

(Descriptions are East and North unless marked otherwise)

NORTHERN OKLAHOMA

ALFALFA COUNTY

Company, farm and location—	Remarks:
Smith Brothers' No. 1 Forbes, SE cor. NW NW Sec. 12-27-11w	Shut down 1,232 ft.
J. W. Bailey's No. 1 Acre, SW cor. NE Sec. 14-24-11w	Rigging up standard tools 4,660 ft.; cleaning out.

BECKHAM COUNTY

Ray Johnson and J. R. Cuniff's No. 1 Brower, C NW Sec. 29-10-22w	Shut down 3,784 ft.
Producers Exploration Co.'s No. 1 Sidell, SE cor. SW SW Sec. 17-9-22w	Shut down 2,402 ft.
Carson et al's No. 1 Danby, SW cor. SE NE Sec. 20-8-22w	Drlg. cement plug 1,594 ft.

BLAINE COUNTY

Lowen et al's No. 1 Unknown, NW cor. SW NW Sec. 17-16-11w	Spudded and shut down.
Washoma Oil Co. et al's No. 1 Phillips, C NW SW Sec. 13-19-10w	Shut down 3,730 ft.

CADDO COUNTY

Simms Pet. Co.'s No. 1 Cobsa, SW NW Sec. 24-6-11w	Rig.
W. J. Hartley's No. 1 Galbreath, SE cor. NW SE Sec. 29-5-12w	Shut down 3,394 ft.

CHEROKEE COUNTY

Weaver & Proctor's No. 1 Benge, NE SE Sec. 8-14-21	Drlg. 405 ft.

CLEVELAND COUNTY

Harris et al's No. 1 Highbee, SE NW Sec. 20-6-1	Shut down 6,518 ft.
Daniels & LeWright's No. 1 Vandever, C SW Sec. 15-7-1w	Shut down 3,130 ft.

COAL COUNTY

A. M. Van Orden's No. 1 Jamison, SE NW Sec. 31-1-9	Shut down 1,600 ft.
Blackwell O. & G. Co.'s No. 1 L. Jackson, NW cor. Sec. 26-3-9	Shut down 3,365 ft.
W. E. McGraw's No. 1 King, C SW NE Sec. 11-1-8e	Shut down 3,030 ft.

COMANCHE COUNTY

Croy & Young's No. 1 Cline, NW NE NE Sec. 8-3-10w	Rig.
Shasta Oil Co.'s No. 1 Romwalt, SW NW Sec. 11-2-10w	Shut down 1,709 ft.
G. W. Stogner's No. 1 Doebel, C SW SW Sec. 3-3-9w	Shut down 1,450 ft.
Green et al's No. 1 Wilson, C NE SW Sec. 14-1-12w	Shut down 4,055 ft.

GARFIELD COUNTY

Shell Petroleum Corp.'s No. 1 Loomis, C NW NW Sec. 32-23-4w	Wilcox 6,132 ft.; drlg. 6,228 ft.
E. L. Love et al's No. 1 White, SE cor. NW Sec. 9-24-6w	Drlg. 5,625 ft.

GRADY COUNTY

J. V. Bailey's No. 1 Hubbard, C NE NW Sec. 1-10-6w	Shut down 100 ft.
J. M. Henry et al's No. 1 Abraham, SE cor. NW Sec. 4-5-8w	Rig.

GRANT COUNTY

Bu-Vi-Bar and Amerada's No. 1 Hurst, C SW Sec. 25-26-5w	Drlg. 3,154 ft.
Cowden et al's No. 2 Vollmer, CEL NE SW Sec. 22-25-4w	Shut down 5,640 ft.

(Continued on Page 167)

Kansas Oil Production Holds Steadily

Eastborough Discovery Well Will Be Deepened. A 5,000-Bbl. Well in Rice County. More Western Tests

By W. A. Spinney
Staff Correspondent, Kansas Fields

Kansas production continues to be held at a steady level notwithstanding the new large wells being opened in the Eastborough Pool in Sedgwick County. The daily average for the state was approximately 114,100 bbls. for the week ending August 16.

The new Eastborough Pool near Wichita, is leading the State in new development work. Twenty-four new operations were reported in the State for the same seven days. Sedgwick County had eight of these, Greenwood County had four, and Butler and Stevens Counties had three each. Other new operations were divided in Morris, Barber, Russell, Ellis, Barton and Rice Counties, with one each. The discovery well in the Eastborough Pool will be drilled deeper. The discovery well was Producers & Refiners Corp., E. W. Marland, Inc., Fisher & Lauck and E. B. Shawver's No. 1 Mackey, NE cor. SW SW, Section 30-27-2. It is to be drilled to the Simpson sand unless production is increased with deeper drilling in the chat where it is now bottomed at a total depth of 2,790 feet. The Producers & Refiners Corp. is operating the property. When the well was completed last August it made around 80 bbls. a day and is now making 20 bbls. a day. At the present time only one well in that pool is producing from the Simpson sand.

Aladdin Petroleum Corp. and others' No. 1 Christman, SE cor. NE NE, Section 25-27-1, Sedgwick County, is being drilled near the city limits of Wichita. The location was announced during the week and if it finds production it will extend the producing area a half mile west, in the Eastborough Pool.

Magnolia Petroleum Co. failed to extend production in the Valley Center Pool, when its No. 1 Anderson, in Section 18-26-1, Sedgwick County, found water in the Simpson sand at 3,419 feet. The 6-inch casing is being underreamed to test the Silicious lime.

5,000-Bbl. Well in Rice County

The wildcat of the Shell Petroleum Corp. and others' No. 1 Ploog, in Section 33-18-9w, in Rice County, is estimated good for 5,000 bbls. a day. In a four-hour swabbing test the well made 712 bbls. in an 8-inch hole with the swab never lower than 700 feet from the top of the hole. Some express the opinion if the 5-inch casing was landed and the well permitted to produce through it, production would exceed 5,000 bbls. a day. The oil comes from Silicious lime at 3,249-53 feet. Because of the lack of storage and pipe line facilities the well is shut in and it may be some time before it is put on steady production.

Following the finding of oil in the wildcat of Tatlock and others, in Section 33-18-9w, Rice County, about 12 miles from the nearest production, it is believed that J. H. Tatlock and H. V. Elwell may dispose of several blocks of leases in that area. These men, operating as partners, leased about 60,000 acres on the Ellsworth Arch, on which the Schurr Pool in Rice County is located, several years ago. Shell Petroleum Corp. has taken over the operation of the well in Section 33-18-9w, which is owned jointly by the Carter Oil Co., Empire Oil & Refining Co., J. A. Hull Co., Shell Petroleum Corp., J. H. Tatlock and H. V. Elwell. The well made 740 bbls. the first 24 hours from the Silicious lime at 3,249-53 feet. Tankage totaling 5,750 bbls. has been erected on the lease. With ample storage at the well it may be drilled deeper and a production test made. It is without a pipe line connection. Aladdin Petroleum Corp.'s No. 1 Schrader, NW cor. NE, Section 28-20-10w, half a mile southeast of the Schurr Pool, in Rice County, had a showing of oil and water at 3,272-74 feet, and more water at 3,276 feet, where the casing was being underreamed.

Will Drill in Pawnee

Phillips Petroleum Co. and Deep Rock Oil & Refining Co. have announced a wildcat location for No. 1 Cuthbertson, C NE, Section 27-20-18w, in the northwestern part of Pawnee County. The new operation will be on a 2,500-acre block, with the Phillips company in charge of operations.

Development of oil and gas in Greenwood County in the Patterson Pool, has slowed down. The Prairie Oil & Gas Co., Empire Oil & Refining Co., and others have considerable work to be started. The Tulsa Oil Co. and others' No. 1 Thrall, in Section 6-24-12, south of the Patterson trend, is pumping about 50 bbls. a day from the first break in the Mississippi lime. Prairie Oil & Gas Co. and A. M. Landon are continuing to develop the Newhouse property in the Hamilton district by locating No. 7 Newhouse, C. NE NE, Section 1-24-11.

Gas for Colorado Springs

Gas production from the Hugoton gas field in Stevens and Morton Counties is to have another outlet. The City Council of Colorado Springs, Colo., has contracted for natural gas from the Hugoton Field for a period of 20 years. The agreement provides for the construction of a 200-mile 10-inch pipe line from the Stevens and Morton Counties gas field in southwestern Kansas to Colorado Springs. Construction is to begin about April 1, 1931, and gas is to be delivered to the city's gate by August 1, 1931. The Stevens County gas field was discovered in 1927. The discovery well was near Hugoton. After several wells were completed distribution was completed in Hugoton, but no further development came until late in 1928, when a wildcat test 5 miles from production was completed for 10,000,000 feet of gas. The Argus Gas Co. was organized and acquired franchises in Dodge City and 14 other Kansas towns in southwestern Kansas. Later the Argus Production Co. was formed for development purposes. Early in 1930 the Moody-Seagraves interests announced the construction of a pipe line from the Hugoton gas field to eastern Nebraska and Iowa. After this announcement the Argus Production Co. started 30 gas tests on its holdings which consist of approximately 356,000 acres in the area.

A new gas well was completed in the Stevens County gas field, testing 8,000,000 feet, by Martin & Loxie in the C NW, Section 2-35-39w. The gas was found in the regular pay horizon at 2,710-2,820 feet.

Eight tests for gas are to be drilled in the Hugoton gas field by the Pioneer Petroleum Co. and others in all of which rotary tools will be used. Location for the first well is No. 1 Beavers, C NW, Section 1-35-38w, Stevens County. The test will be on a 6,400-acre block near the five tests recently completed by Benedum & Trees. The entire block was formerly owned by the Pioneer Petroleum Co. which farmed out part of the block for a test well.

Extension in Sumner County

The Prairie Oil & Gas Co.'s No. 1 Herrick, in Section 15-35-2, southeastern Sumner County, extends production in the Padgett area. The well flowed 33 bbls. an hour from the chat at 3,443-67 feet, the first hour. The well is only a short distance north of the Oklahoma state line.

The four wells in the state line pool southwest of Caldwell, in the southern part of Sumner County averaged 845 bbls. of oil daily for the week ending August 15.

The discovery well in the Voshell Pool in McPherson County, Ted Washabaugh and others' No. 1 Voshell, NE cor., Section 9-21-3w, is being abandoned by W. C. McBride, Inc., which company purchased the property. The well made considerable gas and 30 bbls. of oil for about a year.

Test in Gove County

Another county in western Kansas is being tested for oil and gas. Western Kansas continues to be attractive to the oil operators as more sand bodies are found and wildcat tests produce. Two more tests are under way in Gove County, which is the most northwestern county to be explored. Boucher Oil Co. and M. M. Valerius's No. 1 Todd, NW cor. Section 24-13-27w, was drilling at 3,000 feet on the last report. To the northwest the Atlantic Oil Producing Co. and T. C. Johnson's No. 1 Wright, SE cor. NE, Section 11-12-27w, is a rig. Both of these tests are expected to be drilled to the 4,800-foot formation, unless production is found in shallower levels. Operators expect to test all formations and correlations are to be kept so that accurate geological data of the area may be determined. Both of these tests are located on the Darton arch, which trends in a southwesterly direction from Nebraska through Kansas to the Oklahoma Panhandle, making a sharp dip in the neighborhood of the Stevens and Morton Counties gas fields. Other companies interested in the area are the Prairie Oil & Gas Co., Producers & Refiners Corp., Phillips Petroleum Co., Skelly Oil Co., The Texas Company and many individuals.

Russell County

Operators are continuing to develop the south Fairport Field in Russell County. Two new locations were made during the week, The Texas Company and Jacobs' No. 3 in Section 31-12-15w, and Davis & Weiland's No. 6 in Section 1-13-16w. The Prairie Oil & Gas Co. and Empire Oil & Refining Co.'s No. 2 Ochs, in Section 25-15-14w, a wildcat, has been shut in to save drilling offsets. The well was completed for 200 bbls. a day. Prairie Oil & Gas Co. and Slick, Pryor & Lockhart's No. 1 Berrick, SE cor. SW Section 23-15-13w, a wildcat, is being plugged back to 3,307 feet from a total depth of 3,322 feet, where it is expected to make a producer.

Butler County

Austin and others' No. 1 Hallenbough, NE cor. NE, Section 22-27-5e, is a location. Empire Oil & Refining Co.'s No. 20 Houston, SW cor. SW, Section 19-26-5e, has been completed for 75 bbls. in sand 2,655-2,712 feet, total depth 2,716 feet. Lario Oil & Gas Co.'s No. 1 Gelwick, SE cor. NW SW, Section 6-27-4e, has been abandoned in lime 3,040 feet. Connell and others' No. 1 Nixon has been abandoned in lime 2,790 feet. Agate Oil & Gas Co.'s No. 1 Deathrage, SW cor. NW SE, Section 20-29-4e, has been abandoned in lime 3,040 feet.

Coffey County

The Prairie Oil & Gas Co.'s No. 1 Hatch, NW cor. SE, Section 35-21-13, is a location.

Ellis County

Davis and others' No. 6 Weiland, NE cor. SW NE, Section 1-13-16w, is a location. Jamot Brown and others' have staked location for No. 1 Truan, SE cor. SW. Section 12-15-16w. Stearns and

(Continued on Page 112)

WILDCAT OPERATIONS IN KANSAS

(Descriptions are East unless marked otherwise)

BARBER COUNTY

Company, farm and location—	Remarks:
Barbara Oil Co.'s No. 1 Hamblin, SW NW Sec. 24-33-13w	Fishing 4,487-4,508 ft.; 30,000,000 ft. gas; cleaning out.
Phillips Pet. Co.'s No. 1 Powell, SE cor. SE Sec. 11-32-10w	Drlg. 4,475 ft.

BARTON COUNTY

Slick and Prairie's No. 1 Rude, SW cor. Sec. 11-16-13w	Drlg. 2,520 ft.

BUTLER COUNTY

McCulloch and Empire's No. 1 Lilley, SW NW NW Sec. 23-23-5	Spudding.
Pioneer Pet. Co.'s No. 1 Crist, NW SE Sec. 33-26-4	Drlg. 2,960 ft.
Farrell et al's No. 1 Sutton, NW cor. Sec. 18-28-7	Drlg. 760 ft.
Gypsy Oil Co.'s No. 1 Osborne, NW SE Sec. 22-26-3	Drlg. 2,380 ft.
Joe Liggett's No. 1 Guanther, C SE NE NW Sec. 29-26-7	Drlg. 2,785-93 ft.; show oil.

CHAUTAUQUA COUNTY

Leighty et al's No. 1 Carr, NW SE Sec. 5-33-9	Spudding.

CLARK COUNTY

Watchorn's No. 2 Morrison, NW NE Sec. 20-32-21w	Shut down 6,530 ft.

CLAY COUNTY

Crystal Oil et al's No. 1 Tivier, SW cor. Sec. 19-8-2	Drlg. 1,810 ft.

COFFEY COUNTY

McGregor's No. 1 Wood, NE NW SW Sec. 20-22-15	Drlg. 650 ft.
Ritchey et al's No. 1 Rossenmacher, C SE Sec. 36-22-13	Water 2,233-50 ft.; abandoned.
Roberts et al's No. 1 Hay, SW SE NW Sec. 32-22-15	Fishing 1,100 ft.

COWLEY COUNTY

Tom Fine's No. 1 Boyd, NW NE Sec. 32-32-4	Drlg. 2,470 ft.

DICKINSON COUNTY

Severs et al's No. 1 Lavengood, NE SW Sec. 13-13-2	Shut down 2,205 ft.
Kruger et al's No. 1 Diche, C NW NE NE Sec. 17-13-4	Shut down 2,935-43 ft.; water.
E. N. Morgan's No. 1 Whithair, NW SE Sec. 9-12-1	Drlg. 3,030 ft.

DOUGLAS COUNTY

Steinbuckel's No. 1 Unknown, SW NE NW Sec. 34-14-21	Shut down 1,100 ft.
Jenkins & Scott's No. 1 Haden, SE NW Sec. 10-12-17	Shut down 1,800 ft.

ELLIS COUNTY

Central Commercial Oil Co.'s No. 1 Helms, SE cor. NE Sec. 2-12-20w	Drlg. 3,256 ft.
Streeter & Stearns' No. 1 Leiker, SW NE Sec. 26-13-20w	T. D. 4,028 ft.; abandoned.
Byrene et al's No. 1 Fisher, NW SE Sec. 4-11-20w	Shut down 1,000 ft.
Rush Oil Co.'s No. 1 Gatewood, NW cor. NW Sec. 4-15-20w	Shut down 3,750 ft.

ELK COUNTY

Croft & Frazier's No. 1 Keys, SE NE Sec. 26-31-10	Drlg. 735 ft.

ELLSWORTH COUNTY

Slick et al's No. 1 Unknown, NW cor. Sec. 25-17-10w	Drlg. 1,425 ft.

FORD COUNTY

Swain et al's No. 1 Kenthorne, C NW Sec. 21-25-24w	Shut down 3,575 ft.

GOVE COUNTY

Johnson and Atlantic's No. 1 Wright, SE NE Sec. 11-12-27w	Rig.
Valerius & Baucher Oil Co.'s No. 1 Todd, NW cor. Sec. 24-13-27w	Drlg. 3,000 ft.

GRAHAM COUNTY

Gulf Coast Oil Co.'s No. 1 Johnson, C S half Sec. 27-8-25w	Shut down 4,370 ft.
Naylor et al's No. 1 St. John, NW SE SE Sec. 27-8-25w	Drlg. 4,370 ft.

GRANT COUNTY

McKenna et al's No. 1 Sullivan, NE cor. Sec. 12-29-38w	Shut down 50 ft.

(Continued on Page 169)

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Zwolle Extension Has 1,200 Barrel Well

Third Producer in Urbana District of Union County, and Another Large Shallow Gasser in Pope County, Arkansas

By D. H. Bancroft
Staff Correspondent, Louisiana-Arkansas

SHREVEPORT, La., Aug. 18.—Definite extension of the Zwolle Field 4 miles east and a mile south by a 1,200-bbl. flowing well, completion of a third producer in the Urbana district of Union County, Arkansas, the new test being free of water, and completion of another large gasser in the Pope County, Arkansas, shallow district wildcat gas field, were among the major developments of the last week in North Louisiana and Arkansas.

Zwolle's chalk rock producing field last spring was extended 4 miles east and a mile south by a 9-bbl. pumper but no subsequent tests there had shown commercial production. On August 12, Pelican Natural Gas Co.'s No. 3 Louisiana Long Leaf Lumber Co., SE NW, Section 4-7-11, was bailed in as an 8,000,000- to 10,000,000-foot gasser at a depth of 2,334 feet. The following day the hole had drilled itself deeper and oil began to flow. The well is now pinched in to a quarter-inch choke and is flowing at the rate of 1,200 bbls. daily of 40.2 gravity oil.

It is a western offset to the same company's No. 1 Louisiana Long Leaf in the same section, which was the 9-bbl. pumper that originally opened the new 4-mile extension. Six-inch casing had been set at 2,318 feet.

Marine Oil Co., which uncovered the 3,500-foot oil sand horizon in Urbana, in Section 10-18-13, has completed No. 4 W. B. Thompson, in the same section, at a depth of 3,555 feet, flowing by heads at the rate of 500 bbls. daily of oil free of water. The other two producers there are making large amounts of salt water and one well there turned completely to salt water after being completed, flowing at the rate of 3,000 bbls. of oil daily. Location has been made for two more tests, both in the same section.

Arkansas-Louisiana Pipe Line Co., a Cities Service subsidiary, added another shallow gasser in Pope County, Arkansas, when its No. 1 J. E. Moore, SE NE, Section 16-9-21, was completed at 1,314 feet, making an estimated daily gas output of 38,600,000 feet daily.

McClintock & Goedka, who have been drilling No. 1 Ogles, Section 35-13-5, Drew County, since June 21, 1928, have finally junked the hole at a depth of 2,619 feet.

NORTH LOUISIANA

Arkansas Fuel Oil Co. completed No. 1 Floyd, Section 25-23-12, Cartersville district, Bossier Parish, Louisiana, as a 5-bbl. pumper at 3,176 feet and National Drilling & Production Co.'s No. 1 Matlock, in Section 26-23-12, was abandoned at 3,200 feet as a salt water hole. When The Texas Company's No. 4 Henry Rose, Section 31-23-11, refused to pump over 1 bbl. daily this test was abandoned at 3,172 feet. Louisiana Gas & Fuel Co.'s No. 7 Thigpen & Herold, Section 19-17-11, Wistar district, Bossier Parish, was a 1,500,000-foot gasser at 3,025 feet.

Morehouse Parish contributed two gassers and a wildcat failure. Louisiana Gas & Fuel Co.'s No. 1 Archie, Section 22-20-4e, gauged 9,197,175 feet of gas at a depth of 2,135 feet, and Southern Carbon Co.'s No. 56 fee, Section 15-20-4e, gauged 31,608,000 feet at a depth of 2,156 feet. Ruston Drilling Co., after testing salt water at 3,039 feet, abandoned No. 1 Tucker & Platt, a wildcat test in SE NE, Section 8-20-6e.

One small gasser was completed in Ouachita Parish's part of the Monroe gas area, this being Arkanas-Louisiana Pipe Line Co.'s No. 2 Potts, Section 30-19-4e. Richland Parish's gas field had two gassers, Palmer Corp.'s No. 1 Brown, NW NE, Section 27-16-6e, which gauged 2,092,900 feet of gas at 2,450 feet, and Richland Production Co.'s No. 1 Hale, in Section 22-16-6e.

Eight failures, seven of them in the Zwolle area, were recorded in Sabine Parish. In northwest Sabine, a wildcat test, Arkansas Louisiana Pipe Line Co.'s No. 1 Whitney, 8 miles southwest of the village of Benson, and in the center of the SE, Section 20-10-14, was abandoned as a salt water hole at a depth of 3,305 feet. This test had a small show of oil, gas and salt water in a drill stem test from 3,091 to 3,106 feet.

Two townsite tests were abandoned at Zwolle as dry holes, these being Central Petroleum Co.'s No. 1 Baptist Church, Section 31-8-12, abandoned at 2,590 feet, and Glassell & Merren's No. 1 Thomas, in the same section, abandoned at 2,600 feet.

Loring Oil Co., which has had more than average success in getting production in the Zwolle chalk rock, abandoned three wells including No. 5 Bowman-Hicks, Section 34-8-12, a comparatively deep test drilled to 4,176 feet and abandoned as a dry hole in sandy lime at 4,176 feet. It also abandoned No. 4 Bowman-Hicks, in the same section, as dry at 2,669 feet, and No. 1 Shull, on the northeast edge of production, was abandoned as a duster at 2,600 feet. It is located in NW SW, Section 26-8-12. Olsan Brothers' No. 2 Ferguson, NW SE, Section 33-8-12, offsetting No. 1 in the same section which was a 3,000-bbl. producer that later went dead and was eventually revived as a much smaller producer, was abandoned as a salt water hole after plugging back to 2,430 feet from 2,467 feet.

Greenwood Production Co.'s No. 3 Norsworthy, Section 9-21-3e, Union Parish, was a 1,763,000-foot gasser at 2,205 feet, rock pressure being 1,020 pounds.

The Blossom sand producing field in Sarepta, Webster Parish, added two pumpers. Magnolia Petroleum Co.'s No. 4 Schoggins, Section 1-22-11, with 8 feet of sand is pumping 75 bbls. of oil and twice that much salt water from 2,717 feet. Southern Production Co.'s No. 2 Slack, in the same section, is a 40-bbl. pumper at 2,734 feet. A. H. Tarver and others' No. 3 Sabine State Bank, Section 26-8-12, an edge well in the east Zwolle Field, which blew in some three weeks ago flowing 1,000 bbls. through choke and estimated good for 4,000 bbls. wide open, later going dead, has been revived under pressure. This behavior is similar to two other of the largest wells in that part of the field, both of which subsequently were revived.

S. P. Borden and others have spudded in No. 1 Thomas, SE NW, Section 27-16-9w, a wildcat in Bienville Parish, Louisiana, and are drilling at 100 feet. Andrews & Davlin are preparing for another drill stem test at 1,499 feet in No. 1 Nattin, Section 15-22-14, Bossier Parish. Joe Burnham and others' No. 1 Hood, Section 30-11-14, DeSoto Parish, showed 500,000 feet of gas and a little oil in a drill stem test from 1,960 to 1,970 feet, but is going deeper, now being down to 2,150 feet. S. A. Guy and others have derrick up for No. 1 Dowling Brothers, Section 31-14-14, DeSoto Parish, Holly district.

MISSISSIPPI

No new gassers were completed in Missisippi during the week. Jackson Oil & Gas Co. had to junk and abandon No. 1 Patton, Section 17-5-2e, Rankin County, Jackson district, at a depth of 2,549 feet. Several tests are ready to drill in near Jackson, which will tend to show the trend of the gas field.

Production

Daily average production of the various pools in this area last week follows:

NORTH LOUISIANA

Caddo, light	9,345
Caddo Heavy	2,595
Homer	3,520
Haynesville	4,780
De Soto-Red River	3,060
Elm Grove	450
Bellevue	685
Cotton Valley	1,980
Urania	5,310
Pleasant Hill	550
Sarepta-Cartersville	3,850
Zwolle	3,950
Holly	990
Total	41,065
Last week	41,650
Decrease	585

ARKANSAS

El Dorado	4,225
Smackover, light	5,120
Smackover, heavy	37,300
Stephens	930
Nevada County	1,000
Lisbon	945
Champagnolle	4,770
Bradley	65
Mount Holly	90
Urbana	1,000
Total	55,445
Last week	55,040
Increase	405
Both States	96,510
Last week	96,690
Decrease	180

TAX REFUNDS

Middle States Petroleum Corp. has received approximately $530,000 from the Internal Revenue Bureau during the last year in refunds for overassessment of income and profit taxes in previous years, including a recent refund of $70,533 for the years 1920, 1921 and 1922. All refunds are the result of operations of Middle States Oil Corp., the assets of which were purchased by Middle States Petroleum Corp.

LOUISIANA-ARKANSAS PROVEN AREAS

NORTH LOUISIANA

BOSSIER PARISH—CARTERVILLE

Company, farm and location—	Remarks—
Del.-La. Dev. Co.'s No. 6 Bollinger, 330 ft. S, 220 ft. W, NW cor., Lot 17, in Lot 16, Sec. 31-23-11	Full oil; W.O.S.R; 16 ft. broken sand; T.D. 3,217 ft.
Greenwood Prod. Co.'s No. 2 Bollinger, 990 ft. W, 330 ft. S, NE cor. NE SE, Sec. 36-23-12	Cmtd. 6⅝-in. 3,138 ft; 5 ft. sand; W.O.S.R. 3,173 ft.
Magnolia Pet. Co.'s No. 2 Matlock, 330 ft. S and W, NE cor. SE SW, Sec. 25-23-12	W.O.S.R. 3,188 ft.
Magnolia Pet. Co.'s No. 3 Matlock, 330 ft. N, 330 ft. W, SE cor. SE SW, Sec. 25-23-12	Cmtd. 8¼-in. 3,132 ft; T.D. 3,179 ft; arranging to deepen.
Magnolia Pet. Co.'s No. 2 Roberson, 330 ft. S, 330 ft. E, NW cor. SW NE, Sec. 26-23-12	Shot formation with 20 qts. 2,942-50 ft; C.O; T.D. 3,184 ft.
Palmer Corp.'s No. 2 Roberson, 330 ft. N, 330 ft. E, SW cor. NW NE, Sec. 26-23-12	Derrick.
The Texas Co.'s No. 1 Pine Woods Lbr. Co., 1,650 ft. S, 300 ft. E, NW cor., Sec. 25-23-12	6-in. 2,650 ft; T.D. 2,663 ft.
The Texas Co.'s No. 2 Hy Rose, 965 ft. E, 425 ft. N, C, Sec. 31-23-11	O.W.D.D; began drlg. July 22; drlg. shale 3,147 ft; old T.D. 3,075 ft; cmtd. 4½-in. 3,148 ft; T.D. 3,174 ft.
The Texas Co.'s No. 15 Wilkinson, 990 ft. S, 330 ft. W, NE cor., Sec. 36-23-12	6-in. 3,135 ft; sand 3,142-60 ft; T.D. 3,176 ft.
Tippett Drlg. Co.'s No. 3 Holmes, 330 ft. N, 330 ft. E, SW cor. NE NW, Sec. 36-23-12	300 ft. oil in hole; waiting on power; T.D. 3,180 ft.
Woodley et al's No. 1 Roberson, 330 ft. N, 330 ft. W, SE cor. SW NE, Sec. 22-23-12	Surface csg. collapsed; W.O; T.D. 1,500 ft.

(Continued on Page 122)

WILDCAT OPERATIONS IN LOUISIANA-ARKANSAS

NORTH LOUISIANA

AVOYLLES PARISH

Company, farm and location—	Remarks—
R. E. Tippett's No. 1 Chateline, NE NE, Sec. 34-1n-3e.	Cored S.W. sand 3,140-47 ft; drlg. S.W. sand 3,400 ft; S.D. 3,410 ft.

BIENVILLE PARISH

Ark.-La. P. L. Co.'s No. 1 Graves, 660 ft. S, 878 ft. W NE cor. NW, Sec. 22-16-10	Tested dry 2,031 ft; S.W. 2,036 ft; reaming to bottom.
W. A. Nichols et al's No. 1 McDermott, 660 ft. S, 660 ft. W, NE cor. NE NE, Sec. 28-18-6	D.S. test 2,281-2,358 ft; 1 fourble mud; 10 ft. oil; S.D. for csg.

BOSSIER PARISH

Andrews & Daveline's No. 1 Nattin, 100 ft. N, 250 ft. W, C, Sec. 15-22-14	Claim 6-ft. saturated sand (oil) 1,476-82 ft; D.S. test 1,485 ft.
Autrey Oil Co.'s No. 1 Johnson, 1,120 ft. N, 200 ft. E, SW cor. NW, Sec. 34-19-11	Began drlg. July 25; S.D. for fuel 60 ft.
Autrey Oil Co.'s No. 1 McDade, 200 ft. S, 200 ft. E, C, Sec. 28-19-11	Began drlg. Aug. 8; 10-in. 89 ft; drlg. 927 ft.
Triangle Drlg. Co.'s No. 1 Bollinger, C SE SE, Sec. 36-23-13	Drlg. 1,200 ft.

CADDO PARISH

Falcon Oil Co.'s No. 1 Oden, NE cor. SE NE, Sec. 19-19-14	Arranging test 2,475 ft.
L. B. Mawk's No. 1 Swann, 440 ft. N, 200 ft. E, SW cor., Sec. 23-21-14	S.D. for fuel; T.D. 700 ft.

CATAHOULA PARISH

Nick Barbee et al's No. 1 L. McGraw, 150 ft. N, 150 ft. W, SE cor. SW NW, Sec. 30-10-9	Drlg. 2,125 ft.
National O. & G. Co.'s No. 1 Kirkland, 585 ft. E, 495 ft. N, NW cor., Sec. 35-9-1n	Drlg. gumbo 2,980 ft.

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Proration in Effect in Darst Creek Pool

Pettus Operators, With One Exception, Favor Curtailment to 7,500 Bbls. per Day, Fearing Crude Cut

By B. D. Stevenson
Staff Correspondent, Southwest Texas Fields

SAN ANTONIO, Tex., Aug. 18.—Proration is now in effect in Darst Creek and will continue under the present schedule until October 2 at least. It is ordered by the Railroad Commission.

Proration has been voluntarily agreed upon among the operators of the Pettus Field, with the exception of one operator, restricting that field to a daily average production of 7,500 bbls., though it is making about 1,000 bbls. less than that at this time. Along with proration in Pettus comes the talk that the posted price in that field will be cut from $1.40 per barrel to $1.15 per barrel. Darst Creek was the first pool in Southwest Texas to go under proration and Pettus will be the second. In the meantime the entire State will be under proration effective August 28 on orders of the Railroad Commission.

The potential production of the Darst Creek Field is 156,822 bbls. daily on a full 24-hour gauge and not on a gauge of two hours multipleid by 12 as has been done in the field up to this time. The daily runs are to be restricted to 42,004 bbls. with 462 bbls. daily of free oil in addition.

This 24-hour gauge of 156,822 bbls. is a surprise to some operators, as the field has been flowing about 75,000 bbls. daily for several weeks following the breakup of the proration agreement. The highest potential gauge based on a two-hour open flow multiplied by 12 to obtain the 24-hour potential, was 245,864 bbls. on May 16 and the potential July 1 was 191,063 bbls. After flowing 75,000 bbls. daily for some time the field shows on a 24-hour gauge 156,822 bbls. Previous to the breaking up of the agreement on restriction, the field had been held to around 20,000 bbls. daily. The 24-hour gauge of 156,822 bbls. therefore seems at least to show wonderful producing powers. Many operators have put it far ahead of Luling and Joe Bruner Fields but there was no opportunity to check up and compare for the other two fields were allowed to produce naturally while the Darst Creek Field was restricted from the first.

Pettus Proration

Proration of the Pettus Field was agreed upon by a conference of operators held in Houston and the daily production was fixed at 7,500 bbls. There are 22 producing wells in the Pettus Field at this time and the daily average production for the week ending August 8 was 6,434 bbls. All of the wells are choked in and some were not producing for the full week. One of the 22 wells is the gasoline well of Glasscock Brothers. One other, counted in the list, the Grayburg No. 1-A Kimball was not on production at any time during the week.

Cut Pettus Crude?

Probability is that a cut in the posted price of Pettus crude will come soon. The posted price is $1.40 a barrel but the Houston Oil Co. has been paying only $1.15 per barrel. The new proration agreement must first be accepted by the Railroad Commission and incorporated into its order covering the entire State but the cut in the posted price of Pettus crude is understood to be on the way. Humble Pipe Line and Gulf Coast Pipe Line are the other consumers and purchasers of Pettus crude and they are understood to be getting ready to make the cut.

Operators in the field will protest in some fashion or other the cut in price and advance the argument that Pettus crude according to its gravity and quality should bring a price greater even than $1.40. Much of the Pettus crude is very high gravity.

The southwest end of the Pettus area the past week got somewhat of a setback when the Grayburg Oil Co. abandoned its discovery well due to mechanical trouble and inability to complete the test. Also Grayburg abandoned its No. 1 Copeland west of the discovery well and No. 1-B Kimball east of the discovery well and Arkansas Fuel Oil Co. abandoned its No. 1 Kimball east of the Grayburg's discovery well. Other tests started in that territory on the strength of a new pool being opened have shut down and are waiting to see what next happens. Grayburg Oil Co. has started its No. 2-A Kimball located a little west of the discovery well as a replacement test and it is the only thing drilling in that part of the country.

Southeast of Pettus Field

Ed Price was getting ready to test out his No. 1 Weiss southeast of the Pettus Field as this was being written. He had drilled the plug at 4,415 feet and was preparing to swab. It should be remembered that on a drill stem test this showed for a big gas well. He has made two new locations, one 900 feet southwest of the No. 1 and the other 900 feet northeast of No. 1. Derrick is up for the test on the southwest.

Southwest of Darst Creek

Adams & Lyles got a dry hole in the No. 1 Otto Neitsch southwest of Darst Creek Field. It was the one well that was being watched at this time. It was an Edwards lime test. Interest now shifts to the Cranfill & Reynolds' No. 1 McIntyre in the same general area but considerably removed from the Adams & Lyles' No. 1 Neitsch. No. 1 McIntyre, at the close of the week, was deep enough to soon get the chalk and disclose whether it is high or low.

Chapman Well Comes Back

In the Chapman Pool in Williamson County W. D. Anderson's No. 1 M. V. Lawrence, the big well of the field, that sanded up and was allowed to stay sanded up due to lack of pipe line facilities, has been cleaned out and deepened 23 feet and is back as big as ever. It is rated by those in the field as a 10,000-bbl. well but is not allowed to do it for lack of storage and transportation.

Trapshooter Reilley completed a well in the field the past week, his No. 2 Lawrence. It came in flowing at the rate of 200 bbls. per hour.

Laredo District

Most of the completions of the past week in the Laredo district were in the Escobas or Muckelroy Pool in Zapata County, where there were nine oil wells completed with total initial production of 760 bbls. and one gas well of 15,000,000 feet. O. W. Killam's No. 24 Cuellar in the pool north of Escobas came in for 200 bbls. and W. G. French and the Magnolia Petroleum Co. each completed a 70-bbl. well in the new oil producing spot at the north end of the Cole area. O. W. Killam completed his No. 5 Bruni near the town of Bruni in Webb County for 10,000,000 feet of gas and these constituted the total of the producers completed in the field for the week.

Southwest Texas Production

Daily average production of the pools in the Southwest Texas area for the week ending August 16 follows:

Branyon	23
Bruner	17,554
Buchanan	177
Chapman	7,280
Dale	292
Darst Creek	48,977
Kingsville	137
Larremore	30
Luling	9,920
Lytton Springs	788
Manford	310
McMullen	35
Medina	22
Mirando	11,206
Pettus	6,319
Somerset	1,552
Yoast	380
Total Southwest Texas	105,002
Week ending August 9	106,376
Decrease	1,374

LAREDO DISTRICT COMPLETIONS

Cole Pool—Webb County

French Oil Corp.'s No. 3 Rosa Benavides, 950 feet north line, 150 feet west line, Survey 659, total depth 2,342 feet, 70 bbls. O. W. Killam's No. 5 Bruni, 270 feet northwest line, Block 26, Adams Subdivision, Mariano Arispe grant, total depth 2,600 feet, 10,000,000 feet of gas, 850 pounds pressure. Magnolia Petroleum Co.'s No. 4 Benavides, 950 feet north line, 150 feet east line, Survey 660, total depth 2,340 feet, 70 bbls.

Jennings-Muckelroy—Zapata County

Alamo Drilling & Leasing Co.'s No. 4 Trevino (Blair), 150 feet west line, 150 feet north line, Block 1, Survey 66, total depth 1,251 feet, 75 bbls. Same company's No. 6 Trevino (Blair), 175 feet east line, 500 feet north line, Block 1, Survey 66, total depth 1,267 feet, 70 bbls. Edgington & Niles' No. 7-A Trevino, 150 feet southeast line, 150 feet east line, Block 5, Survey 65, total depth 1,232 feet, 75 bbls. Same parties' No. 4-B Trevino, 750 feet southwest line, 150 feet southeast line, Block 4, Survey 65, total depth 1,227 feet, 15,000,000 feet of gas. Allied Gas Co.'s No. 2-B Trevino, 1,533 feet southwest line, 150 feet northwest line, Block 15, Survey 65, total depth 1,268 feet, 125 bbls. Same company's No. 15-A Trevino, 150 feet east line, 750 feet southeast line, Block 6, Survey 65, total depth 1,252 feet, 75 bbls. Allied Gas Co.-Allen & Morris' No. 4 Gutierrez, 4,263 feet southeast line, 1,050 feet northeast line, Share 4, Fansler partition, Comitas grant, total depth 1,276 feet, 100 bbls. Nix & Blankenship's No. 3 Montemayor, 490 feet north line, 150 feet west line, Block 1, Survey 64, total depth 1.293 feet, estimated 100 bbls. W. R. Shankle's No. 4 Trevino, 450 feet southeast line, 150 feet northeast line, Block 14, Survey 65, total depth 1,260 feet, 65 bbls. S. R. C. Co.'s No. 12-B Cuellar, 450 feet southwest line, 150 feet southeast line, Block 13, Survey 65, total depth 1,258 feet, 75 bbls.

Jennings-Cuellar—Zapata County

O. W. Killam's No. 24-C Cuellar, 505 feet north line, 680 feet southwest line, Survey 278 (location corrected), total depth 1,574 feet, 200 bbls.

ABANDONED TESTS

Jennings-Muckleroy—Zapata County

Nordan & Morris and Grimm & Yakey's No. 1 E. de Las Santos, 382 feet southwest line, 150 feet southeast line, Share 7, Fansler partition, Comitas grant, total depth 1,440 feet, blew in as gasser, plugged and abandoned.

NEW LOCATIONS

Jennings-Muckleroy—Zapata County

Allied Gas Co.-Allen & Morris' No. 5 Gutierrez, 4,263 feet southeast line, 1,350 feet northeast line, Share 4, Fansler partition, Comitas grant. Same parties' No. 6 Gutierrez, 4,263 feet southeast line, 1,650 feet northeast line, Share 4, Fansler partition, Comitas grant. Same parties' No. 7 Gutierrez, 4,263 feet southeast line, 150 feet northeast line, Share 4, Fansler partition, Comitas grant. Same parties' No. 8 Gutierrez, 3,963 feet southeast line, 150 feet northeast line, Share 4, Fansler partition, Comitas grant. Same parties' No. 9 Gutierrez, 3,663 feet southeast line, 150 feet northeast line, Share 4, Fansler partition, Comitas grant. S. R. C. Oil Co.'s No. 12-B Trevino. Same company's No. 6-A Trevino, 490 feet north line, 150 feet east line, Block 8, Survey 66, spudded.

DRILLING ACTIVITY

Cole Pool—Duval County

W. E. Mulholland's (Miller I. Shaw) No. 2 S. Benavides, 218 feet north line, 1,050 feet west line, Survey 173, total depth 2,250 feet, drilling.

Kohler Pool—Duval County

Simms Oil Co.'s No. 9 Dinn, 660 feet east line, 660 feet south line of northwest of southeast of Survey 143, rigged up. Humble Oil & Refining Co.'s No. 48 Kohler, 990 feet south line, 475 feet east

(Continued on Page 109)

WILDCAT OPERATIONS IN SOUTHWEST TEXAS

ATASCOSA COUNTY

Company, farm and location—	Remarks:
Frontier Oil Co.'s No. 2 Boynton, 775 ft. SW of Brown-Fuller gas well	T. D. 800 ft.; drlg.
Nute, Walder & Derden's No. 1 J. B. Young, 750 ft. W line, 370 ft. E line of 107-ac. tract in the Wm. Moore Sur.	Location.

BLANCO COUNTY

Anderson & Manning's No. 1 Speer, 600 ft. to S line, 800 ft. to W line, John W. Speer Sur.	Location
Ben H. Ashe Pet. Corp.'s No. 1 Glasscock, moving in to drill on leases out of the Rodson block north of Blanco City	Location.
Hardy Sitton's No. 1 McMillan	Drlg. water well.
Liles-Adams et al's No. 1 Stanford, 150 ft. to S line, 1,420 ft. to E line of James Stanford's No. 155	T. D. 385 ft.; drlg. in gray lime.
McCreary et al's No. 1 Schenling, 900 ft. to SE line, 600 ft. to SE line of J. A. Rouse No. 118 Sur., 4 miles SW from Blanco City	Drilling.
J. R. Meeks' No. 1 Walker, Noel Nixon Sur. No. 23, 3 miles N from Blanco City	T. D. 335 ft.; drlg.
J. R. Meek's No. 1 Walker, 360 rds. from W line, 482 rds. from S line of 735-ac. tract in Survey No. 23	T. D. 420 ft.; set 8¼-in. casing.
C. Rosenfield's No. 1 Hohenberger, 800 ft. to W line, 1,250 ft. to N line, Sur. No. 94	Moving in machinery.

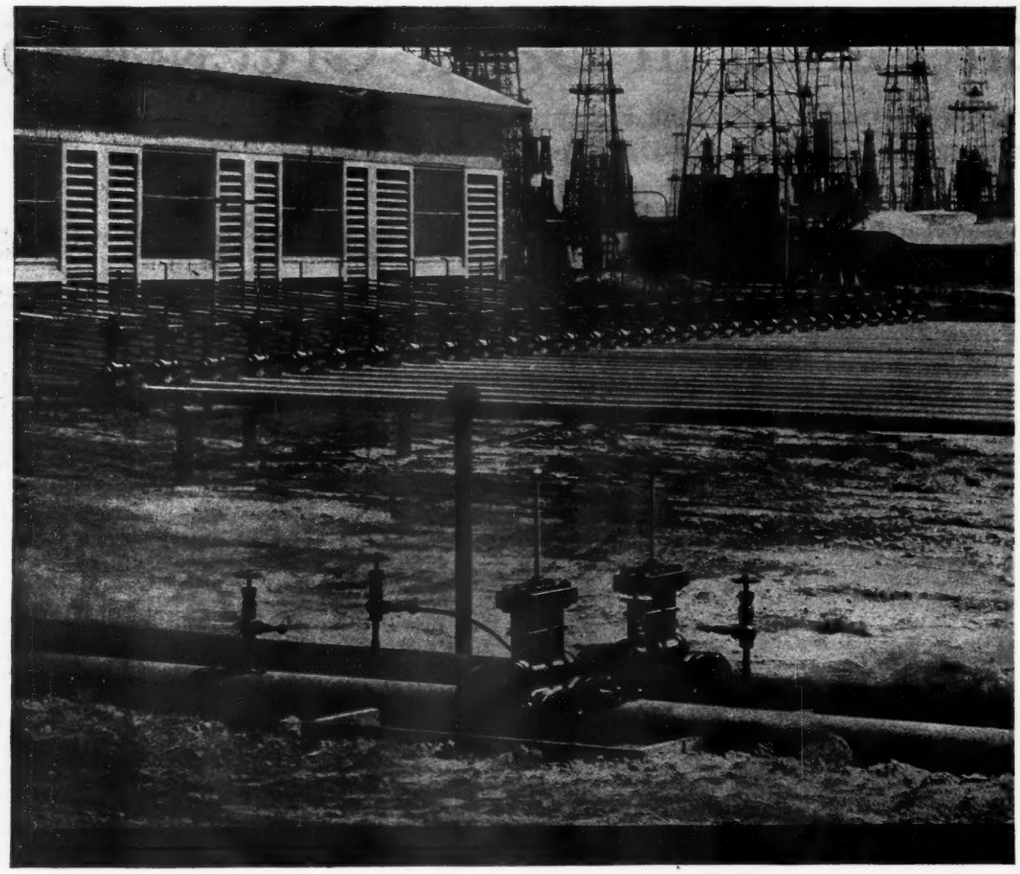
BASTROP COUNTY

Judge Batts et al's No. 1 Alexander, 1,670 ft. N of S line, 528 ft. E of W line, Blk. 3, in the W. M. Eastland Sur., 3½ miles NE from Red Rock	T. D. 2,548 ft.; shut down.
Pacific Oil & Gas Co.'s No. 1 J. Spooner, 300 ft. from N line, 400 ft. from W line in the L. Lavenuz Sur., 4½ miles E from Cedar Creek	T. D. 2,350 ft.; S. D., light show of oil.
Pacific Oil & Gas Co.'s No. 1 J. M. Litton, 150 ft. N and W lines of tract	Location.
Majestic Pet. Co.'s No. 1 J. M. Breeding, 160 ft. from N line, 1,020 ft. from W line of 200-ac. tract, 940 varas from W line, 1,225 varas from S line of M. Andrews Sur., 13 miles W from Smithville	T. D. 500 ft.; shut down in shale.

BROOKS COUNTY

Houston Oil Co. of Texas' No. 1 Wormser-Holblen, 1,550 ft. S, 2,650 ft. E of intersection of Lisandro Saenz & Manuel Saenz tracts, El Palo & Blanco de Maguellas grant, SW of Lasater discovery gas	Location.

(Continued on Page 121)



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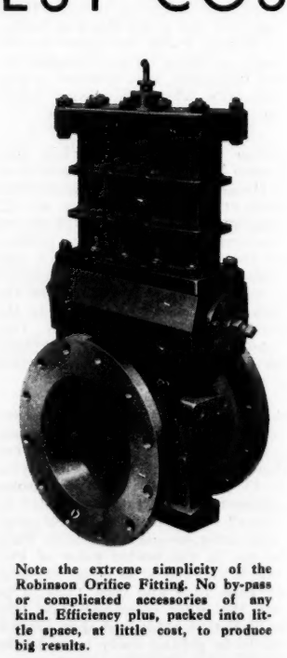

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NEARLY 13,500 ROBINSONS IN USE TODAY

Deepest Test on Gulf Coast Abandoned

Acadia Parish Test Quit at 8,730 Feet. Small Extensions at Several Fields. Barbers Hill Has Best Well

By Neil Williams
Staff Correspondent, Gulf Coast Fields

HOUSTON, Texas, Aug. 18.—Field developments on the Gulf Coast the past week were of little importance so far as new production was concerned. Completions were confined to small, routine extensions of present producing areas. The abandonment of The Texas Company's No. 5 Rayne heirs, southeast of the Jennings, Acadia Parish, Louisiana, was of chief interest in that it put an end to a test which has exceeded by 600 feet all previous depth records on the coast, this well being quit after drilling 8,730 feet. Coastal operators generally were more concerned during the week in steps being taken to work out a program of proration in the various fields in line with state-wide proration to go into effect August 27.

Fields which figured with small extensions included Orchard, Barbers Hill, Refugio, Humble, Esperson and Vinton. At Saratoga, the newly developed 500-foot sand yielded an unusually good well for that field in Rio Bravo Oil Co.'s No. 95-A Cotton, which pumped 63 bbls. of grade A pipe line oil in the first 15 hours. The development of the latter sand is of interest in that the sand, which is in an old area on top of the dome, had been passed up for over 20 years until this year, when the Rio Bravo Oil Co. decided to test it. As a result this company has been rewarded with a series of good small wells, which, considering the shallow sand, pay off readily in consistent production. The development of this sand, all this year, has resulted in the company's daily output at Saratoga being boosted to above 600 bbls.

Orchard Dome Pool

Gulf Production Co. further proved up the comparatively new pool on the south side of the Orchard Dome, Fort Bend County, with the completion of two fair wells, Nos. 23 and 24 Moore, each of which extended production 400 feet. No. 23 came in flowing 500 bbls. of fluid, 20 per cent water, on a five-sixteenths-inch choke from sandy shale at 4,133 feet. No. 24, a somewhat better well, flowed initially at the rate of 800 bbls. daily from sandy shale at 4,038 feet, it being on a half-inch choke. Orchard is controlled entirely by the Gulf Production Co., which keeps two rigs running. Locations have been made on the same flank of the dome for Nos. 25 and 26.

Refugio Deep Sand

At Refugio, deep sand development resulted in the completion of two more producers, The Texas Company's No. 2 Ben Shelton, east offset to Houston Oil Co.'s No. 1 Kay, brought in two months ago, and L. L. Smith's No. 1 Sumner, west offset. The three wells, each in the 5,400-foot sand, are in an area some 3,500 feet to the northwest of the main 5,400-foot producing area. The Texas Company's well, which flowed initially only 300 bbls. at 5,467 feet, since has increased to around 600 bbls. The Smith well has been good for 250 bbls. daily at 5,471 feet.

The chief interest at Refugio, however, now has turned to the possibilities of the 6,400-foot sand, which already has been proved by four scattered wells to extend under a large area of the Refugio district. Independent Oil & Gas Co.'s No. 6 Jerry Reilly, on which hinges an extension of this sand approximately 4,000 feet west and under the town lot 3,700-foot sand area and which offers the possibility of the deepening of a score or more of these 3,700-foot wells within the city limits, late in the week had not been tested. It is in the sand at 6,447-58 feet and has been waiting for cement to set. In the meantime, Houston Oil Co.'s No. 1 West, Block 67, in the heart of the town lots, is nearing the sand below 6,300 feet. If a well, this will extend the sand four blocks to the south of the present southernmost well, Mission Drilling Co.'s No. 1 Moss, Block 110. In the midst of the 5,400-foot sand area on the east side of the Refugio Townsite, Morgan Oil Corp.'s No. 2 O'Connor, has picked up the sand and late in the week was coring below 6,440 feet. This test is approximately 4,000 feet to the southeast of the Moss well in Block 110, and on its outcome will determine the deepening of a group of 5,400-foot wells which surround it.

In the north end of the 5,400-foot field, Moody-Seagraves Producing Co.'s No. 2 O'Brien has cemented casing to test the recently proved 5,600-5,700-foot sand, found in this well at 5,690-95 feet. This well blew out early in July and after killing the gas pressure and completing a fishing job is preparing to test.

Two miles northeast of the Refugio Field, Houston Oil Co.'s No. 1 Rose Lambert, west offset to Union Producing Co.'s No. 1 F. M. Lambert, discovery well of the 5,900-foot sand and so far the only well from that horizon and in that area, has been deepened to 5,917 feet after two salt water tests and is preparing to test again. Unless the Houston Oil Co. well makes a producer, that area probably will be condemned as four other tests drilled around the discovery well have been abandoned, proving so far this well to be a freak.

Best Well of Week

The best well in size during the week was Sun Oil Co.'s No. 8 J. Wilburn, east flank, Barbers Hill, which was completed flowing 1,000 bbls. daily pipe line oil with 138 feet of screen set at 5,228 feet. Yount Lee Oil Co.'s No. 4 Phillips, on the tract which offsets Sun's J. Wilburn lease to the south, also was completed as a 450-bbl. well at 5,285 feet. Both of these wells belong to the new series of producers which are being drilled inside the circle of production on the east side of the dome, and consequently picking up the sand materially higher than the older wells farther out from the dome. Developments in this area were marked by the starting up of three new tests by Sun Oil Co., two more on the Wilburn fee tract, and one on the J. Wilburn lease.

On the west, or extreme opposite side of the dome, Sun Oil Co.'s No. 1 O. K. Winfree, a wildcat approximately 4,000 feet from production, either from the pool on the northwest or that on the southwest, has found a sand showing oil at a depth of 5,297 feet. It has cemented casing and if it makes a well it will prove an important link in proving the line of production around the dome. The sand in this test underlies a ledge of cap rock, which was drilled through. Between this test and the production on the southwest flank, The Texas Company already has made location and erected derrick for its No. 1 Winfree, which, with Rio Bravo Oil Co.'s No. 1 Fisher, now drilling below 4,350 feet, if successful, will prove a continuous line of production.

Humble Dome

The west flank of the Humble Dome also witnessed further proving up with the addition of Sun Oil Co.'s No. 9 Bender, which came in flowing 675 bbls. daily at 3,908 feet. This well is expected to be augmented over the weekend by Rio Bravo Oil Co.'s No. 4 fee and No. 1 H.E.&W.T., both of which were testing sands.

Daily Average Production

Daily average production in the past week indicated very little change for the Gulf Coast as a whole. Had it not been for Pierce Junction, where Rio Bravo Oil Co.'s No. 19-A Settegast held up steadily around 5,000 bbls. since its completion 10 days ago resulting in a substantial increase for that field, the figures for the Coast might have recorded a material decrease. Some of the 5,000-bbl. new production at Pierce Junction has been offset by Rio Bravo shutting down all but three flowing wells in the field. Due to The Texas Company losing one of its old producers, which has been flowing around 2,000 bbls. daily, West Columbia took a sharp drop.

Daily average production for the week ended August 16 was;

SOUTHEAST TEXAS

Allen	35
Barbers Hill	17,552
Baton	1,108
Big Creek	4,022
Blue Ridge	1,828
Brenham	145
Boling	1,070
Clay Creek	1,440
Damon Mound	563
DeWalt	11,817
Fannett	509
Goose Creek	4,535
Hankamer	2,837
High Island	915
Hull	7,430
Humble	20,429
Jasper County	25
Lost Lake	602
Markham	315
Nash	289
North Dayton	961
Orange	2,098
Orchard	1,951
Pierce Junction	14,383
Port Neches	1,705
Raccoon Bend	11,976
Refugio	29,023
Esperson (Sheeks)	2,421
Saratoga	1,140
Sour Lake	2,202
South Liberty	3,765
Spindletop	17,034
West Columbia	3,833
Total Southeast Texas	170,348
Week ending August 9	171,444
Decrease	1,096

SOUTH LOUISIANA

Anse La Butte	32
Bayou Blue	30
Bayou Bouillon	1,141
Black Bayou	506
Edgerly	405
Jennings	3,103
Hackberry	4,865
Lake Barre	1,296
Lake Pelto	138
Lockport	3,183
Port Barre	3,860
Sorrento	85
Starks	624
Sulphur	3,500
Sweet Lake	1,167
Vinton	6,284
Welsh	127
White Castle	1,191
Total South Louisiana	30,537
Week ending August 9	29,522
Increase	1,015
Total Gulf Coast	200,885
Week ending August 9	200,966
Decrease	81

Vinton Field

In the new productive area on the north side of the Vinton Field, Calcasieu Parish, Louisiana, Vinton Petroleum Co.'s No. 8 Matilda Gray added another producer when it came in flowing 350 bbls. daily at 3,276 feet. Five rigs are operating in this pool. Other completions of the week included Navarro Oil Co. and Humble Oil & Refining Co.'s No. 4-A Cain, which is flowing an estimated 750 bbls. from a sand at 4,549 feet. This sand was passed when the hole was drilled to a total depth of 6,245 feet and abandoned. Recently Navarro Oil Co. went back into the hole and sidetracked and drilled back to the sand. At Esper-

(Continued on Page 110)

GULF COAST FIELDS AND WILDCATS

Week ended August 16

BARBERS HILL—CHAMBERS COUNTY

Mills Bennett Production Co.'s No. 10 Barrow, southwest	Set screen 4,780 ft.
Mills Bennett Production Co.'s No. 3 E. W. Barber, north	Coring sand 3,507 ft.
Mills Bennett Prod. Co.'s No. 1 Henry Fisher, southwest	Drlg. lime 5,411 ft.
Mills Bennett Prod. Co.'s No. 4 Gulf-Higgins, southwest	Drlg. shale and lime 4,682 ft.
Humble Oil & Ref. Co.'s No. 6 fee, west	Cem. casing 4,650 ft.
Humble Oil & Ref. Co.'s No. 7 Meyers fee, west	Standing.
Humphreys Corp.'s No. 1 Fitzgerald, north	Drlg. shale 1,744 ft.
Humphreys Corp.'s No. 1-B Barber, north	Drlg. hard lime 2,019 ft.
Humphreys Corp.'s No. 9-A Kirby, northwest	Drlg. shale and lime 4,409 ft.
Humphreys Corp.'s No. 6-A Barber, northwest	Drlg. salt 3,629 ft.
Humphreys Corp.'s No. 8-B Kirby northwest	Drlg. cap rock 1,448 ft.
Humphreys Corp.'s No. 2 Scott	To pump 7,296 ft.
Humphreys Corp.'s No. 2-H Kirby (workover)	Trying to set 5 3/16-in. casing 6,617 ft.
McAlbert Oil Co.'s No. 7 Woodward	Coring sandy shale 5,525 ft.
Republic Production Co.'s No. 3 Kirby (workover)	Rig up to work over; total depth 5,336 ft.
Rio Bravo Oil Co.'s No. 1 Fisher, southwest	Drlg. hard sandy lime 4,335 ft.
Sinclair Oil & Gas Co.'s No. 2 McKinney fee	Total depth 6,597 ft.; pulling liner 5,072 ft.
Sinclair Oil & Gas Co.'s No. 5 McKinney, fee	Drlg. sand 5,084 ft.
Sun Oil Co.'s No. 1 Wilburn fee, southeast	Set 5 joints screen 5,215 ft.; flowing 435 bbls.
Sun Oil Co.'s No. 8 Wilburn fee, southeast	Coring sandy shale 5,248 ft.
Sun Oil Co.'s No. 9 Wilburn fee, southeast	Rig.
Sun Oil Co.'s No. 10 Wilburn fee, southeast	Derrick.
Sun Oil Co.'s No. 8 J. Wilburn, southeast	Set 138 ft. screen 5,228 ft.; comp. flowing 1,000 bbls. oil.
Sun Oil Co.'s No. 9 J. Wilburn, southeast	Cem. casing 4,616 ft.
Sun Oil Co.'s No. 10 J. Wilburn, southeast	Derrick.
Sun Oil Co.'s No. 6 Chambers, south	Coring sand and shale 4,124 ft.
Sun Oil Co.'s No. 1 Zadie Fisher, southwest	Drlg. sand and boulders 1,105 ft.
Sun Oil Co.'s No. 1 O. K. Winfree, west	Cem. casing 5,297 ft.
The Texas Company's No. 4 Wilburn, southeast	Total depth 5,149 ft.; to pump.
The Texas Company's No. 1 Williams, southwest	Drlg. gumbo 1,830 ft.
The Texas Company's No. 1 Winfree, west	Derrick.
Yount Lee Oil Co.'s No. 1 Hindman, southwest	Drlg. hard lime 3,723 ft.
Yount Lee Oil Co.'s No. 15 Chambers, south	Drlg. sand and lime 2,382 ft.
Yount Lee Oil Co.'s No. 3 Fisher, southeast	Drlg. hard lime 3,595 ft.
Yount Lee Oil Co.'s No. 4 Phillips, southeast	Set 5 joints screen 5,285 ft.; comp. flowing 450 bbls. oil.
Yount Lee Oil Co.'s No. 5 Phillips, southwest	Location.
Yount Lee Oil Co.'s No. 8 Woodward, southeast	Oil sand; cem. casing 5,011 ft.

RACCOON BEND—AUSTIN COUNTY

Humble & Valley's No. 9 Thompson	Drlg. shale and lime 1,102 ft.
Humble & Valley's No. 10 Thompson	Drlg. sand 3,041 ft.
Humble & Valley's No. 1 Fritz Lamp	Rig.
Humble & Valley's No. 3 Buchanan	Derrick.
Humble & Valley's No. 3 Diemar	Derrick.
Humble & Valley's No. 2-B Hardy	Flowed short time 150 bbls. daily; to pump 3,202 ft.
Humble & Valley's No. 7 Payne	Derrick.
Humble & Valley's No. 8 Payne	Derrick.

(Continued on Page 126)

Big Wells Shown By Hobbs Open Flow

Six Wells Produced 81,068 Bbls. in 24 Hours. Tidal No. 1 Grimes Made 21,496 Bbls. Proration Working Well

By Tolbert R. Ingram
Staff Correspondent, Rocky Mountain Area

DENVER, Colo., Aug. 18.—Several wells in the Hobbs Pool, in Lea County, New Mexico, showed interesting results when gauged in open flow tests, the Tidal Oil Co.'s No. 1 Grimes, the largest in the field, being credited with a potential of 21,496 bbls. in 24 hours on a regauge, and after having been on production for a month. Six new locations were announced. Northern and southern limits of the pool appear to have been defined in the Landreth Production Co.'s No. 1 State and the Texas Production Co.'s No. 1 Selman. Four completions were reported, including the Midwest Refining Co.'s No. 8 State, which is estimated at 10,000 to 15,000 bbls., and the Amerada Petroleum Corp.'s No. 1-A State, which made 847 bbls. in four hours. The Sun Oil Co.'s No. 1 McKinley is rated as an 11,000-bbl. well. The Texas Pacific Coal & Oil Co.'s No. 5-A State in the Cooper area was abandoned at 3,793 feet, and A. D. Morton's No. 1 State, in the Tatum area, was abandoned at 5,267 feet. Flynn, Welch & Yates' No. 58 State in the Artesia area, in Eddy County, made 85 bbls. initial, and a small gas well was completed in San Juan County.

Colorado reported one completion, a dry hole in the South Florence Field. A rumor of an oil discovery in the Continental Oil Co.'s Pipe Springs test proved to have originated from fuel oil put into the hole to circulate pipe. A small gas well was completed in Montezuma County, extending the gas area three-fourths of a mile.

Wyoming is feeling a tinge of the old-time excitement due to the Midwest's test on the Midway Dome showing oil as the hole is bailed. The Producers & Refiners succeeded in penetrating the Frontier gas sands at Big Sand Draw and found more gas in the Dakota. The Osage Field had several completions, one in the Jones Pool flowing 30 bbls. an hour. There was a small completion in Salt Creek and one new well spudded on the Byron Dome. The Mountain Fuel Supply Co. completed a 4,000,000-foot gasser in Baxter Basin.

NEW MEXICO

Hobbs Area—Lea County

The potential production of the Hobbs Pool in Lea County, New Mexico, is increasing rapidly not only on account of the new completions, but due in a large measure to a change in the method of gauging the wells to determine the basis for proration. When the agreement went into effect on July 12, the estimates gave the field an open flow capacity of 146,501 bbls. from 25 wells. That figure was used temporarily until the wells could be gauged under the agreement which provided for three-hour production tests through 3-inch tubing. Under this method the field registered a potential on August 1 of 80,272 bbls. from 28 wells. Some of the operators protested that gauging of wells capable of making more than 7,500 bbls. a day through tubing did not permit them to register their true potential. The proration committee recognized the protests and as a result the wells are being tested at open flow capacity without tubing. Gauges taken on six of the big wells the past week gave them an aggregate open flow potential of 81,068 bbls. in 24 hours, or a little more than shown by the entire field under the tubing plan. It is understood that the operators generally are now fully satisfied with the proration program and are working in complete harmony with the committee. The open flow gauging showed some interesting results. The Tidal Oil Co.'s No. 1 Grimes, SW NE SE, Section 29-18-38, which has been on production for a month, was credited with a potential of 21,496 bbls. when regauged. This is the largest well in the field. George F. Getty, Inc.'s No. 2 McKinley, SW SE NE, Section 30-18-38, holds second place, being credited with a potential of 20,250 bbls. a day when regauged on the open flow basis, and same firm's No. 1 McKinley, SW cor. NE, Section 30-18-38, was credited with 12,279 bbls. on the regauge.

Six new locations were announced this week. Some of these still further widen out the area being drilled though none of these can hardly be classed as wildcats. These include the following: The Texas Production Co.'s No. 2-C State, SE cor. NE, Section 25-18-37, half a mile to the west and the same distance south of the nearest producers, has completed cellar. The Midwest Refining Co.'s No. 6 McKinley, NW cor., Section 5-19-38, is building rig. The California Co.'s No. 1 McKinley, 1,320 feet from the west line and 2,310 feet from the north line, Section 20-18-38, has cellar completed. The Atlantic Oil Producing Co.'s No. 1 Grimes, SW cor. SE, Section 20-18-38, is a location. The Prairie Oil & Gas Co.'s No. 2 Selman, SW cor. NE, Section 15-19-38, is a location. Decision to drill this location was held up until the Texas Production Co.'s No. 1 Selman, one location to the south, an edge well, was completed. The Humble Oil & Refining Co.'s No. 1 Grimes, SW NE NE, Section 29-18-38, is a cellar.

The limits of the Hobbs Pool both on the north and south were determined this week in the Landreth Production Co.'s No. 1 State, SW cor. SE, Section 7-18-38, and the Texas Production Co.'s No. 1 Selman, NW cor. SE, Section 15-19-38. The Landreth well, approximately 2 miles north of the nearest producer, was drilled to 4,520 feet where it shut down for orders. It had 3,500 feet of sulphur water at 4,507-20 feet, a show of gas and water at 4,447-55 feet and a show of oil at 4,375 feet. The elevation of this well at the surface is 3,674 feet. It topped the salt at 1,835 feet and bottomed the salt at 2,720 feet. At that depth it was running about 300 feet low. The first salt water was at 4,050-60 feet and amounted to one bailer per hour. There was a little more at 4,130-35 feet and a small show of gas at 4,287 feet. The Texas Production Co.'s No. 1 Selman, which about marks the southern limits, was drilled to 4,183 feet. It had shows of oil at 4,110-20 feet, 4,145 feet and 4,160-63 feet. There was an increase at 4,180 feet. On August 6 it swabbed 77 bbls. in six hours, and next day swabbed 90 bbls. in six hours. It had 300 feet of water in the hole. It will be shot before being completed, but it does not look very promising. The distance between these two wells is approximately 8 miles.

Four completions were reported this week in addition to the two which came in last week too late to obtain the details. The best of these was the Midwest Refining Co.'s No. 8 State, C NW NW, Section 4-19-38, which blew in just below 4,000 feet and is estimated at between 10,000 and 15,000 bbls. a day. It is an offset on the east to the Sun Oil Co.'s No. 1 McKinley, and half a mile to the northwest of the Midwest's No. 33 Byers, reported a completion last week. All three wells are running about the same and prove that there is considerable big production territory in that area. The capacity of the Sun company's well was erroneously reported last week. It made 461 bbls. the first hour, open flow, and is estimated at 11,000 bbls. for the first 24 hours. The pay was at 3,986-4,175 feet and the total depth is 4,175 feet. The surface elevation is 3,622 feet, the top of the anhydrite was at 1,460 feet, and the top of the brown lime at 2,784 feet. It also made 10,000,000 feet of gas. The location is the C NE NE, Section 5-19-38. The Midwest's No. 33 Byers, SE SW NE, Section 4-19-38, flowed at the rate of 12,900 bbls. a day on a half hour's open flow test. The California Co.'s No. 1 State, NW SE SE, Section 29-18-38, an offset on the south to the Tidal Oil Co.'s No. 1 Grimes, the largest well in the field, was completed at 4,170 feet. It gauged 16,700,000 feet of gas and made 46 bbls. in one hour through tubing. It then gauged 82 bbls. in one hour open flow. It showed 20 per cent basic sediment and water. The Amerada Petroleum Corp.'s No. 1-A State, SW NW NE, Section 32-18-38, was completed at a total depth of 4,160 feet. It gauged 847 bbls. the first four hours and showed for 20,000,000 feet of gas. The top of the pay was at 3,977 feet. The other completion was the Midwest Refining Co.'s No. 26 State, C SE SE, Section 4-19-38. It is estimated at 1,200 bbls. It is just one-fourth of a mile north of the discovery well which the Midwest brought in two years ago.

Drilling Operations

The Amerada Petroleum Corp.'s No. 2-A State, NE cor., Section 32-18-38, is bottomed at 224 feet in the red beds and rigging up rotary, and its No. 1-B State, SW SE NW, Section 29-18-38, is standing with the 9⅝-inch cemented in anhydrite at 2,704 feet. Its No. 2-B State, SE SW NE, Section 29-18-38, is drilling at 1,795 feet in salt, and its No. 3 McKinley, SW NW NW, Section 30-18-38, is drilling at 3,988 feet in lime.

The Atlantic Oil Producing Co.'s No. 1 State, NE cor., Section 6-19-38, is drilling out plug after cementing the 9⅝-inch at 2,808 feet.

The California Co.'s No. 2 State, NE SW SE, Section 29-18-38, cemented the 9⅝-inch at 2,822 feet, and its No. 3 State, SE cor., Section 29-18-38, is rigging up rotary. Same company's No. 4 State, SW cor. SE, Section 29-18-38, is a rig.

The Continental Oil Co.'s No. 1-A State, SE NW SE, Section 29-18-38, cemented the 9⅝-inch at 2,742 feet and is rigging up cable tools, and its No. 2-A State, SE cor. SW, Section 29-18-38, is drilling at 1,330 feet in red rock. Same company's No. 3-A State, NE NW SE, Section 29-18-38, spudded July 31 and cemented the 15½-inch at 252 feet, and its No. 1-B State, C SW SW, Section 33-18-38, is drilling at 3,216 feet in anhydrite. Last named had a show of gas at 2,780-90 feet and a show of oil and gas at 3,153-63 feet. The Continental's No. 2-B State, NW cor. SW, Section 33-18-38, is drilling at 2,685 feet in anhydrite. It topped the anhydrite at 1,493 feet and the salt at 1,645 feet. The bottom of the salt was at 2,575 feet. The Continental's No. 3-B State, C north line SW, Section 33-18-38, spudded on July 31.

The Empire Gas & Fuel Co.'s No. 1 Hardin, SE cor. NW, Section 19-18-38, spudded on August 2 and is drilling at 760 feet in the red beds, and its No. 2 Hardin, SW cor. NW, Section 19-18-38, is rigging up rotary. Same company's

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NEW IMPERIAL PRODUCER GIVES PROMISE OF BIG PRODUCTION

By Victor Lauriston
Staff Correspondent, Canadian Fields

CHATHAM, Ontario, Aug. 16.—Monthly deliveries from the Turner Valley Field for July show a total of 95,884 bbls., a decline of 16,076 bbls. from the peak production of 111,960 bbls. in June. Freezing conditions affected a number of the large producers, including the Home wells, whose aggregate production in July was 9,944 bbls., compared with 29,641 bbls. in June. A survey shows 41 wells producing, of which 20 registered increases over June and 21 showed declines.

Aggregate deliveries to Imperial Oil, Ltd. in July were 82,542 bbls. compared with 97,483 bbls. in June. Deliveries in July to the Regal refinery were 13,342 bbls. against 14,477 bbls. the previous month. The Imperial deliveries in July included 48,573 bbls. of crude naphtha, 30,362 bbls. classified as discolored naphtha, and 3,607 bbls. as light crude. Deliveries to the Regal refinery were unclassified.

Among the newer wells, Calmont Oils' No. 2 showed an aggregate of 4,592 bbls., or around 150 bbls. a day. On the basis of wet gas flow this well should make around 1,200 bbls. If allowed to flow to capacity, however, it freezes in four hours; so it has been operated on heavy back pressure, at about one-eighth capacity. The production is 75 gravity naphtha, the highest grade in the field.

Others of the newer wells were Freehold Oils' No. 2, with 2,710 bbls.; Advance Oil Co.'s No. 5-A, 1,071 bbls.; Baltac Oils' No. 1, 726 bbls.; Foothills Oil & Gas Co.'s No. 3 (Southwest Petroleums) 2,151 bbls.; Mercury's No. 2, 1,133 bbls.; Mercury's No. 3, 5,110 bbls. and Alberta Pacific Consolidated's No. 2, 968 bbls. The largest individual production for the month was 7,573 bbls. from Royalite Oil Co.'s No. 6, in Central Turner Valley. Royalite's No. 4 declined to 2,327 bbls. Alberta Federated Oils' No. 1 (Freeman Lundy) showed a settled production of 1,376 bbls. for the month. Royalite's No. 11, Section 13-20-3w5, in production for only part of July, gave 5,103 bbls.

New Imperial Producer

Among the Imperial Oil, Ltd. tests, Dalhousie Oil Co.'s No. 7, LSD 11, Section 18-20-2w5, in the Central Turner Valley is reported drilling at 5,325 feet, 325 feet in the lime, and coming into what looks like big production. The present horizon has a wet gas flow of better than 10,000,000 feet, with potential crude naphtha recovery of around 100 bbls.; but the drillers will endeavor to tap a further sand immediately below. If the well proves a big one, it will prove up a large additional area. The nearest crude naphtha producer is Advance Oil Co.'s No. 5-A, nearly a mile south. Dalhousie's No. 5, a short distance north, has been a satisfactory light crude producer but has never been carried to the lime. Additional drilling will probably be undertaken in this area where the Dalhousie and Royalite companies hold most of the acreage.

In South Turner Valley, Home Oil

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California's Present Situation Unique

Elwood Field Shows Signs of Getting Out of Control. Santa Fe Springs Declining but Long Beach Increasing Its Rated Potential

By L. P. Stockman
Staff Correspondent, California Fields

LOS ANGELES, Calif., Aug. 16.—Although crude oil production in California has been reduced to approximately 600,000 bbls. per day by rigid artificial curtailment, the present situation clearly indicates the chronic overproduction which started back in 1921 and has continued all during the intervening period. The present situation is unique in that the settled production of the State is far in excess of normal requirements, thus precluding any possible shortage of crude oil within the next five years, as far as California is concerned. There are no flush fields undergoing intensive development in California at the present time, although there are many areas where daily production could be greatly stimulated by additional drilling or the opening up of completed wells which have been shut down in conformity with the general curtailment program. On the other hand, there are several prolific fields which have only been prevented from upsetting the apple cart by restricting development work. This group includes Elwood, Ventura Avenue, Dominguez, Seal Beach, Inglewood, Coyote and Fullerton. Of these seven fields only two, Elwood and Ventura Avenue, are of any immediate consequence as drilling operations in the others are practically negligible. Ventura Avenue might also be eliminated as a possible disturbing factor as the principal operators in this field, Associated, Shell and General Petroleum, are carefully regulating both production and development work.

Danger at Elwood

The Elwood Field of Santa Barbara County has been slowly but surely getting beyond control, due to the completion of several large flowing wells, with the result that the operators general committee on curtailment notified operators that they must immediately reduce their daily production to the prescribed quota allotted to the field. Production at Elwood has been consistently in excess of its allowable maximum all during August and would have continued along this line if permitted to do so. Elwood has a prescribed allowable of 41,037 bbls. per day, but, notwithstanding this maximum, has been producing anywhere from 45,000 bbls. to 54,884 bbls. per day. This field has not been down to its allowable since July 28, when daily production approximated 40,313 bbls. It is quite obvious that Elwood's present rated potential production of 78,896 bbls. per day will have to be substantially increased in order to reflect prescribed curtailment if operators continue their present method of establishing potentials by flowing new wells wide open instead of through tubing during the customary five-day flow test. Technically, this practice is not prevented by the curtailment agreement but at the same time it inflates the potential production to such an extent that it tends to void curtailment work even though production is subsequently pinched back from the maximum potential established by the wide open flow method. It is quite obvious that no wells will hold up for any length of time if flowed wide open with the result that any curtailment predicated on this basis is merely theoretical for the simple reason that it is impossible to determine just how fast the decline would be in such cases. The predicating of curtailment work on the wide open method violates the spirit, if not the letter, of California's present conservation program because operators are expected to cut back a certain per cent of their production. If these wells will not hold up indefinitely without maintaining back pressure, no curtailment has been effected when the well is beaned back. Fortunately, this method of establishing potentials is restricted to a few operators.

Consider Curtailment

Faced with the threat that the price of Elwood crude oil might be substantially reduced unless daily production was brought down to the maximum allowable, operators held several sessions during the past week in an effort to work out a drilling curtailment for the field. Leading operators recognize the inadvisability of increasing potential production indefinitely by completing new wells as this makes it necessary to increase the per cent of cut to be applied against other older wells. It has been proposed that the present ratio of production between operators be maintained and that no additional wells be completed except where it is absolutely necessary to maintain the accepted basis of production. Engineers have set up tentative plans for submission to the individual operators and if this program is satisfactory it may be ratified within the next few days. This plan is predicated on a definite fixed potential production with the output of each operator pegged on the basis of current production. This will eliminate any further competitive drilling and at the same time stop periodical excesses which occur every time a new well is brought in.

Considerable progress has been made in promoting conservation work in California during the past year with the result that satisfactory prices have been maintained for crude oil in spite of highly competitive conditions which, on several occasions, have driven the price of gasoline substantially lower than manufacturing costs. In order to maintain favorable prices for crude oil it is imperative that operators continue aggressive curtailment because any relaxation at this time is bound to retard recovery and might easily lead to substantially reduced prices. The movement under way at Elwood to restrict drilling operations in order to stabilize production is an admirable one and would prove a big help if it could be enforced in other fields. Unfortunately, however, it is impossible to limit drilling operations in fields like Long Beach and Playa Del Rey because of the large number of small units and diversified holdings. The operators general committee on statewide curtailment has been making a determined effort to peg established maximums for each field regardless of the amount of drilling. This position was reaffirmed at the committee's last meeting and the umpires instructed to demand complete co-operation.

Field Fluctuations

Daily production at Santa Fe Springs is gradually declining but Long Beach, on the other hand, continues to increase its rated potential quite regularly. Every time the potential production is increased the field's allowable is similarly increased with the result that the allowable production for Long Beach is higher today than it was a short time ago. California's daily production has only been below 600,000 bbls. per day on one occasion since the operators general committee on curtailment set 596,000 bbls. per day as the objective toward which to strive. It is obvious that this goal will never be achieved unless the maximum production of each field is pegged at a certain figure and kept there regardless of new completions. During the past several months the fact-finding committee has been obliged to increase California's total daily potential production due to aggressive development work, with the result that it has become extremely difficult to spread the percentage of cut necessary to reduce state production to 596,000 bbls. per day.

Crude oil production in California averaged 600,693 bbls. per day during June and approximately 605,000 bbls. during July. The daily average during the current month to date is somewhat higher due to a substantial excess production at Elwood and increased production at Playa Del Rey resulting from the completion of new wells. It appears quite probable that state production will continue to average around 600,000 bbls. per day during the remainder of 1930, although the average may be slightly higher depending upon the outcome of work at Playa Del Rey. A check indicates, however, that there is very little prospect of any relaxation in curtailment work. It is generally admitted that state production would exceed 800,000 bbls. per day if the restriction on production was lifted. An additional 100,000 bbls. per day would be added within 30 days so that California would be producing around 900,000 bbls. daily. This obviously precludes any relaxation in curtailment work, especially in view of the fact that this represents actual sound production, not theoretical generalities. The longevity of California sands is ample guarantee that this production would be maintained day in and day out. This potential production of 900,000 bbls. per day does not contain the flush production of any new field which could register any abnormal decline over night. It is exclusive of Kettleman Hills and does not contemplate any additional production at Elwood, Ventura Avenue or Playa Del Rey, where additional production could be developed by new drilling.

Only Normal Decline

Attention has been directed to this potential figure in order to illustrate the fact that state production has been drastically reduced by artificial curtailment and that we may not anticipate anything more than a normal decline in settled production. There is not a single field in the State at the present time which can be expected to decline more than a few thousand barrels from month to month, and on the other side of the ledger one can easily find in excess of 250,000 bbls. of curtailed production charged against settled fields. Kern River, for instance, produced 14,344 bbls. per day during June and has an additional 15,000 bbls. per day shut in. This represents a total of 1,506 wells entirely shut down at Kern River, the average daily production of which is 10 bbls. per well. An additional 675 wells capable of producing 24,000 bbls. per day are shut down at Coalinga. These two fields are cited merely to indicate that there is a substantial amount of settled production curtailed throughout California. A total of 5,700 wells are shut down 100 per cent at the present time. On the basis of a state-wide curtailment of 300,000 bbls. per day, this represents an average daily well production of only 53 bbls. Even the most confirmed pessimist cannot find much room for much decline in this daily average curtailment of 53 bbls. per well. This then represents an absolute sound curtailment in settled and semisettled production in addition to any flush or semiflush production in fields which have not yet reached the settled stage.

Kettleman Hills

The chronic overproduction of crude oil in California is particularly interesting because of the possible eventualities during the next few years. It should also be of special importance to those who keep a finger on the pulse of the situation that California is faced with a possible overproduction for another several years, unless operators find it advantageous to dispose of production along the East Coast and in the foreign trade. There is not much chance of any substantial decline between now and next summer so that state production should still be in excess of normal requirements when the present curtailment agreement expires at Kettleman Hills. This brings up one of the possible eventualities which will become an important factor in future economic conditions on the Pacific Coast. Reference is made to the future status of Kettleman Hills because the enormous potentiality of this field makes it absolutely obligatory for operators to formulate some definite plan of curtailment. No definite method has yet been ratified but we may rest assured that Kettleman Hills will be regulated one way or another. This field will not be permitted to produce unrestrained because it would wreck the entire price structure, not only on the Pacific Coast but along the Atlantic Seaboard as well. This 60 gravity crude with several wells yielding 1 bbl. of natural gasoline for each barrel of crude produced would precipitate a chaotic condition heretofore

TANKER SHIPMENTS FROM LOS ANGELES TO ATLANTIC AND GULF COAST PORTS

Commodity—	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Crude oil	.....	.....	.....	.....	68,690	879,835
Fuel oil	.....	.....	.....	.....	71,950	49,950
Diesel and gas oil	.....	.....	.....	.....	2,294,195	1,060,042
Gasoline	486,033	69,433	417,653	59,665	12,270,682	12,724,821
Naphtha distillate	.....	.....	.....	.....	.....	81,750
Coastwise—						
Crude oil	394,400	56,343	434,526	62,075	9,481,480	15,306,454
Fuel oil	293,897	41,985	358,937	51,277	10,498,947	12,931,934
Diesel and gas oil	4,922	703	67,338	9,620	1,143,010	761,002
Gasoline	254,220	36,317	368,155	52,594	7,709,591	6,805,048
Kerosene	4,738	677	.....	.....	119,423	38,582
Exports—						
Crude oil	170,730	24,390	51,315	7,331	4,122,495	3,435,037
Fuel oil	292,446	41,921	265,976	37,997	11,194,336	11,388,329
Diesel and gas oil	102,233	14,605	73,666	10,524	2,899,325	1,480,206
Gasoline	130,395	18,628	355,968	50,853	9,870,720	6,850,233
Kerosene	189,228	27,033	89,210	12,744	2,450,717	1,929,378
Lubricants	.....	.....	.....	.....	10,082	.....

TAKER SHIPMENTS FROM SAN FRANCISCO TO ATLANTIC AND GULF COAST PORTS

Diesel and gas oil	.....	.....	.....	.....	227,648	.....
Gasoline	.....	.....	.....	.....	783,367	1,264,942
Lubricants	.....	.....	.....	.....	16,776	69,172
Coastwise—						
Fuel oil	64,080	9,154	63,077	9,011	2,248,199	1,787,253
Diesel and gas oil	.....	.....	.....	.....	169,165	334,753
Gasoline	245,632	35,090	50,175	7,168	2,662,026	3,130,809
Kerosene	5,180	740	3,576	511	150,800	92,036
Exports—						
Crude oil	.....	.....	.....	.....	3,075	121,603
Fuel oil	.....	.....	.....	.....	662,135	529,011
Diesel and gas oil	.....	.....	68,155	9,736	307,209	155,474
Gasoline	85,030	12,147	87,092	12,442	2,605,171	3,589,320
Kerosene	95,165	13,595	.....	.....	503,368	382,417
Lubricants	.....	.....	.....	.....	18,672	21,899

unknown if drilling was permitted without restraint. It is quite obvious therefore that production and development work will be regulated at Kettleman Hills. Just how this will be done will be decided by the operators themselves in conjunction with the Secretary of the Interior.

If present plans to formulate a definite method of procedure are not successful it is quite probable that progressive operators will petition the State to exercise its police authority. The present gas conservation law has failed to accomplish the desired effect because its provisions were not specific enough to permit general application. The statute in question specifically prohibits the unreasonable waste of natural gas but at the same time fails to define what constitutes an unreasonable waste. The test case involving Santa Fe Springs is up on appeal at the present time but regardless of the outcome the gas law is on the statutes to stay. It may require revision and the method of application changed but this can be done by legislative enactment if necessity demands. For this reason it is quite probable that production activities at Kettleman Hills will be regulated either by mutual consent or regulatory legislation.

Completions During Week

Completions during the past seven-day period were not as numerous nor as prolific as those chalked up last week, although from a numerical standpoint they were larger than the weekly average for the past few months. The best well finished this week was the Elmer Oil Co.'s No. 2 Venice, located in the Playa Del Rey Field of Los Angeles basin. This new well, bottomed at 6,035 feet with a string of 6⅝-inch landed at 5,845 feet, was brought in under a natural flow doing 4,230 bbls. of clean 23.4 gravity oil and 1,600,000 feet of natural gas per day. C. C. Beem successfully recompleted his No. 1 Venice in the shallow sand after cleaning out to bottom at 3,983 feet, and this well was returned to production flowing 325 bbls. of 22.6 gravity oil under a pressure of 450 pounds. The Barnsdall Oil Co., which is developing the Burke lease at Playa Del Rey in conjunction with the Cypress Petroleum Co., finished well No. 3, its second producer in this field, flowing 1,000 bbls. of 23.1 gravity oil per day. This new well, which picked up the conglomerate at 6,032 feet and encountered the top of the schist at 6,043 feet, was bottomed at 6,074 feet and finished with a 6⅝-inch liner carrying 145 feet of perforated landed at 6,042 feet. Due to the lack of adequate storage, this new producer was temporarily shut in but will probably be back on production again shortly.

The successful completion of an 800-bbl. well in the shallow sand at 4,016 feet by the Union Oil Co. a few weeks ago has prompted the Barnsdall and the Ohio Oil companies to drill offsets in order to protect their respective leases from undue drainage. The Barnsdall is making preparations to start work on No. 13-A Burke, while the Ohio is rigging up No. 3 Recreation, both of which will be direct offsets. Considerable new work is getting under way in the Playa Del Rey Field of Los Angeles basin and the 40 wells now drilling will be augmented by several more within the next few days. The Union recently spudded in two new wells on its Townsite lease and is putting the finishing touches on the rig for another. The Elmer Oil Co. staked four additional locations during the past week and will probably start rig construction shortly. The Ohio Oil Co. has reduced the scope of its work but will probably start several new projects in the south end of the field.

Potrero

The Potrero Field of Los Angeles basin, like Playa Del Rey, is reflecting successful development, although the future of this field from an aggregate production standpoint is not comparable with Playa Del Rey. The recent discovery of a new deep zone at Potrero by the Richfield Oil Co. has stimulated work, however, and will probably cause a resumption of drilling in a number of wells which failed to register sustained production in the upper zones. The Richfield added another deep well to its list of producers at Potrero this week by finishing No. 1 Sloan flowing 695 bbls. of clean 36.2 gravity oil per day from 6,079 feet. York & Lockhart became a factor in deep zone production at Potrero this week by finishing No. 2 Willis flowing 950 bbls. of 36.9 gravity oil per day from 6,377 feet. This new well is believed to be producing from the Coffin zone discovered by the Richfield Oil Co. in No. 1 Coffin, located several blocks to the northwest. The only disconcerting feature in connection with development work at Potrero is the failure of zones in this field to hold up for any length of time.

The Continental Oil Co. successfully finished two new wells in the Richfield district during the past week, both of which, however, were pumpers. No. 2 Ross Schlacter was completed doing 180 bbls. per day on the beam from 4,718 feet, while No. 4 Santa Fe was good for 190 bbls. of 22.2 gravity oil daily on the beam at 4,550 feet. The next well scheduled for completion at Richfield is the Arrowhead Oil Co.'s No. 1 Gatewood, which is rotating ahead in a shale and oil sand at 4,295 feet with a string of 8⅝-inch landed and cemented at 4,195 feet. Drilling operations in the Huntington Beach Field at the present time are more or less of a sporadic nature, although the Standard Oil Co., with two

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EVEN BREAK ON PRODUCERS AND DRY HOLES IN MICHIGAN FIELDS

By Paul A. Elliott

MUSKEGON, Mich., Aug. 18.—Ten completions, including five oil wells and five dry holes, were reported throughout Michigan last week. Two small oil producers were completed at Muskegon but the greatest amount of new production was brought in with two new wells in Chippewa Township, Isabella County, in the proven Mt. Pleasant Field, and one well in the new Leaton Pool.

One of the dry holes was in Midland County, in the Mt. Pleasant area, three in Western Michigan and one in the south central part of the State.

The largest of the new wells was the Sias Oil Development Co.'s No. 3 McClintic, SE NW SW, Section 1-14n-3w, Chippewa ownship, Isabella County, which came in for 365 bbls. Dundee limestone was struck at 3,505 feet, pay sands at 3,538 feet and the hole completed at 3,568 feet.

The Dixie Oil Co.'s No. 6 N. Davis, located SE NE SW, Section 2-14n-3w, made approximately 300 bbls. in the Dundee pay sands. Limestone was topped at 3,515 feet and pay sands at 3,541 feet.

The new well in the Leaton Pool is the New York Petroleum Royalty Corp.'s No. 1 Wezensky, NW NE, Section 30-15n-3w, Denver Township, Isabella County, which came in for 125 bbls. a day in the Dundee pay sands at 3,661-66 feet. Limestone was topped at 3,621 feet.

The Benedum-Trees Oil Co.'s No. 1 Grove, NW NW SE, Section 14-15n-7w, Sheridan Township, Mecosta County, went into water after striking a flow of about 1,000,000 feet of gas daily in the Marshall and is being drilled on to the Dundee.

The one dry hole in the Mt. Pleasant area was the Ohio Oil Co.'s No. 1 Thomas Clapp, NW SW, Section 34-13n-1e, Mt. Haley Township, Midland County. It is being plugged at 3,517 feet in the Dundee formation.

Six or eight wells in the proven Mt. Pleasant Field, the Leaton Pool and the Vernon Township area are scheduled for completion in the Dundee pay sands within a few days.

The New York Petroleum Royalty

(Continued on Page 74)

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Union, No. 1 Orchard Dale, Los Angeles Co.	10- 3-11	3,990	sd. sh. drilling
Olympic Realty Corp., No. 1 Venice, Los Angeles Co.	14- 2-15	412	sd. sh. drilling
Burlingham Pet., No. 1 Compton, Los Angeles Co.	17- 3-13	4,490	suspended
Francis, Don, No. 1 Compton, Los Angeles Co.	8- 3-13	572	set pipe
Carlyn, C. H., No. 1 Compton, Los Angeles Co.	9- 3-13	180	sd. drilling
Central Oil Co., No. 1 Compton, Los Angeles Co.	28- 3-13	5,094	resume work
Ohio, No. 1 Moneta, Los Angeles Co.	35- 3-14	7,240	hd. sd. drilling
Guajome Oil Co., No. 1 El Nido, Los Angeles Co.	33- 3-14	rig	suspended
Cal. Ventura Oil Co., No. 1 Manhattan, Los Angeles Co.	30- 3-14	6,525	suspended
Cal. Ventura Oil Co., No. 1 Hermosa, Los Angeles Co.	31- 3-14	3,388	set pipe
McMahon & McDonald, No. 1 Watts, Los Angeles Co.	12- 3-14	4,665	suspended
Tri-State Oil Co., No. 1 Watts, Los Angeles Co.	12- 3-14	4,428	sd. sh. drilling
Rio Grande Oil Co., No. 1 Watson, Los Angeles Co.	17- 4-13	6,290	hd. sd. drilling
Cal Well Drlg. Co., No. 1 Dominguz, Los Angeles Co.	11- 4-13	8,500	will deepen
Shell, No. 1 Van Nuys, Los Angeles Co.	19- 2-15	4,296	sd. sh. drilling
Rio Hondo Pet., No. 1 Puente, Los Angeles Co.	14- 2-10	2,798	fishing
Bidart Oil Co., No. 1 Puente, Los Angeles Co.	15- 2-10	rig	rigging up
Rucker, R. C., No. 1 Puente, Los Angeles Co.	27- 2-10	3,660	suspended
Bardeen Pet., No. 1 Puente, Los Angeles Co.	9- 2-10	3,591	br. sh. drilling
Keck & Hall, No. 1 Puente, Los Angeles Co.	32- 2- 8	1,120	gas—shut in
Marcel Pet. Co., No. 1 Puente, Los Angeles Co.	31- 2- 8	2,655	br. sh. drilling
Celito Oil Co., No. 1 Monterey Park, Los Angeles Co.	25- 1-12	5,278	resume work
Los Gatos Oil Co., No. 1 El Monte, Los Angeles Co.	16- 1-11	1,950	cleaning out
Olympic Corp., No. 1 Calabasas, Los Angeles Co.	18- 1-17	5,695	fishing
Union, No. 1 Coyote, Sansinena, Los Angeles Co.	30- 2-10	4,780	br. sh. drilling
Tureco Oil Co., No. 1 Whittier, Los Angeles Co.	29- 2-11	5,600	fishing
Western Gulf, No. 1 Brea Canyon, Los Angeles Co.	28- 2- 9	6,588	fishing
Lamona Oil Co., No. 1 Pomona, Los Angeles Co.	34- 1- 9	861	hd. sd. drilling
Graham & Loftus, No. 1 Coyote, Orange Co.	18- 3- 9	6,198	sd. sh. drilling
Mesa Pet., No. 1 Newport, Orange Co.	21- 6-10	4,910	suspended
Hall, H. L., No. 1 Newport, Orange Co.	20- 6-10	790	suspended
Standard, No. 1 Newport, Orange Co.	26- 6-10	1,700	sd. sh. drilling
Fidelity Pet. Co., No. 1-A Murrietta, Riverside Co.	23- 7- 8	701	cleaning out
Hemet Pet. Co., No. 1 Ward, Riverside Co.	9- 5- 1	3,560	suspended
Imperial Valley Oil Co., No. 1 Brawley, Imperial Co.	32-11-10	3,000	hd. sd. drilling
McGregor Synd., No. 1 Del Mar, San Diego Co.	17-14- 3	1,265	cleaning out
Borderland Oil Co., No. 1 Encinitas, San Diego Co.	12-13- 4	2,424	hd. sd. drilling
Borderland Oil Co., No. 1 Point Loma, San Diego Co.	30-16- 3	2,416	gr. sd. drilling
Carr, O. K., No. 1 Capistrano, San Diego Co.	13- 8- 8	4,224	hd. sd. drilling
Grey, H. H., No. 1 Redlands, San Bernardino Co.	25- 1- 2	2,525	fishing
Girard & Grimes, No. 1 Corona, San Bernardino Co.	8- 2- 8	1,549	suspended
Western Gulf, No. 1 Santa Ana, Orange Co.	12- 3- 8	mtl.	building rig

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well, location—	S-T-R	Depth	Status
Standard, No. 1 Point Conception, Santa Barbara Co.	X-5- 34	5,470	hd. sd. drilling
Universal Consd., No. 1 Pt. Conception, Santa Barbara Co.	30- 5-34	4,017	hd. sd. drilling
Prairie Oil Co., No. 1 Lompoc, Santa Barbara Co.	15- 7-35	4,691	hd. sd. drilling
Fields Gasoline Co., No. 1 Santa Maria, Santa Barbara Co.	8- 9-33	4,210	br. sh. drilling
Western Gulf, No. 1 Santa Maria, Santa Barbara Co.	5- 9-33	mtl.	building rig
Barnsdall, No. 1 Gato Ridge, Santa Barbara Co.	9- 8-32	2,790	sd. sh. drilling
Deuel Pet. Co., No. 1 Santa Ynez, Santa Barbara Co.	9- 7-30	3,130	suspended
Midwest Oil Co., No. 1 Los Alamos, Santa Barbara Co.	2- 7-33	....	location
General Pet., No. 1 Goleta, Santa Barbara Co.	21- 4-28	4,533	shut in
General Pet., No. 2 Goleta, Santa Barbara Co.	21- 4-28	4,350	suspended
General Pet., No. 3 Goleta, Santa Barbara Co.	21- 4-28	319	sd. drilling
General Pet., No. 134 Goleta, Santa Barbara Co.	21- 4-28	1,485	suspended
General Pet., No. 136 Goleta, Santa Barbara Co.	21- 4-28	1,016	suspended
General Pet., No. 137 Goleta, Santa Barbara Co.	21- 4-28	1,026	suspended
General Pet., No. 138 Goleta, Santa Barbara Co.	21- 4-28	4,931	suspended
General Pet., No. 139 Goleta, Santa Barbara Co.	21- 4-28	1,035	suspended
General Pet., No. 143 Goleta, Santa Barbara Co.	21- 4-28	1,040	suspended
Boles Oil Co., No. 140 Goleta, Santa Barbara Co.	22- 4-28	1,040	suspended
U. S. Pet., No. 141 Goleta, Santa Barbara Co.	20- 4-28	1,035	suspended
U. S. Pet., No. 142 Goleta, Santa Barbara Co.	20- 4-28	1,032	suspended
U. S. Pet., No. 143 Goleta, Santa Barbara Co.	20- 4-28	1,019	suspended
El Camino, No. 149 Goleta Tideland, Santa Barbara Co.	22- 4-28	1,035	suspended
Bolsa Chica, No. 191 Goleta, Santa Barbara Co.	24- 4-29	1,212	sd. sh. drilling
Caldwell Brown, No. 159 Goleta, Santa Barbara Co.	24- 4-29	1,040	suspended
Cochran, J. H., No. 1 Naples, Santa Barbara Co.	7- 4-29	1,700	sd. sh. drilling
Wildcat Oil Co., No. 1 Santa Maria, Santa Barbara Co.	20-10-35	5,102	sd. sh. drilling
Pacific Western, No. 1 Gibraltar, Santa Barbara Co.	14- 5-27	2,345	suspended
Shell, No. 1 Summerland, Santa Barbara Co.	18- 4-25	4,404	set pipe
Standard, No. 2 Casitas, Santa Barbara Co.	26- 4-25	1,497	abandoning
Continental, Tideland permit No. 121, Santa Barbara Co.	33- 4-25	1,085	suspended
Continental, Tideland permit No. 122, Santa Barbara Co.	33- 4-25	1,020	suspended
Continental, Tideland permit No. 123, Santa Barbara Co.	33- 4-25	1,020	suspended
Continental, Tideland permit No. 124-A, Santa Barbara Co.	33- 4-25	418	suspended
Continental, Tideland permit No. 125, Santa Barbara Co.	33- 4-25	1,455	suspended
Continental, Tideland permit No. 126, Santa Barbara Co.	33- 4-25	1,034	suspended
Continental, Tideland permit No. 127, Santa Barbara Co.	33- 4-25	1,055	suspended
Continental, Tideland permit No. 128, Santa Barbara Co.	33- 4-25	1,054	suspended
Continental, Tideland permit No. 129, Santa Barbara Co.	33- 4-25	1,020	suspended
Exeter Oil Co., Tideland permit No. 163, Santa Barbara Co.	32- 4-25	76	suspended
Getty, Geo. F., No. 120 Carpinteria, Santa Barbara Co.	32- 4-25	1,024	suspended
Getty, Geo. F., No. 130 Carpinteria, Santa Barbara Co.	32- 4-25	1,029	suspended
Shell, No. 5 Oxnard, Ventura Co.	14- 2-20	2,780	sd. sh. drilling
Prairie Oil & Gas Co., No. 1 Ventura, Ventura Co.	30- 3-22	6,820	sd. sh. drilling
Bolsa Chica, No. 1-A Temescal, Ventura Co.	4- 4-18	2,506	250 bbls.
Rio Grande, No. 1 Lankershim, Ventura Co.	13- 4-19	1,791	redrilling
General Pet., No. 1 Fillmore, Ventura Co.	6- 3-19	2,935	br. sh. drilling
Associated, No. 1 Rincon Creek, Ventura Co.	19- 4-24	2,080	suspended
Pure Oil Co., No. 1 S. P. Canyon, Ventura Co.	15- 4-21	1,706	sd. sh. drilling
Superior Oil Co., No. 1 Sespe, Ventura Co.	14- 4-21	rig	rigging up
Nordon Oil Co., No. 1-A Buttonwillow, Kern Co.	7-29-24	4,602	sd. sh. drilling
Shell, No. 1 Weed Patch, Kern Co.	29-30-29	5,029	will deepen
Pet. Sec., No. 1 Edison, Kern Co.	14-29-29	2,142	hd. sd. drilling
Symark Oil Co., No. 1 Edison, Kern Co.	24-29-29	2,130	suspended
Sayre, F. M., No. 1 Edison, Kern Co.	5-30-29	4,220	suspended
Elmer Oil Co., No. 1 Tejon, Kern Co.	15-30-30	4,980	fishing
Hancock Oil Co., No. 1 Jasmine, Kern Co.	23-25-27	2,665	suspended
Shell, No. 1 Semitropic, Kern Co.	17-27-23	5,000	sd. sh. drilling
Moran & DeCamp, No. 1 Mojave, Kern Co.	26-10-14	580	hd. sd. drilling
Bardeen, H. A., No. 1 San Emidio, Kern Co.	18-10-23	1,190	suspended
Bardeen, H. A., No. 2 San Emidio, Kern Co.	10-10-23	3,500	sd. sh. drilling
Stabler, W. W., No. 1 Commanche Pt., Kern Co.	4-11-18	2,040	redrilling
Ritchie, J. J., No. 1 Tejon, Kern Co.	33-11-19	1,590	sd. sh. drilling
Wrenn, J., No. 1 Antelope Plains, Kern Co.	32-25-17	812	suspended
Hannon, Tom, No. 1 Devils Den, Kern Co.	25-25-18	2,619	suspended
Richfield, No. 1 Kreyenhagen, Fresno Co.	33-22-16	2,990	hd. sd. drilling
Ohio Oil Co., No. 1 Coalinga, Fresno Co.	8-21-15	2,974	br. sh. drilling
Associated, No. 1 Jacalitos, Fresno Co.	22-21-15	....	location
Petroleum Securities, No. 2 Huron, Fresno Co.	28-20-16	7,390	suspended
Panorama Oil Co., Well No. 1, San Luis Obispo Co.	7-31-21	4,019	suspended
Latin Amer. Pet., No. 1 Shandon, San Luis Obispo Co.	21-27-15	4,480	suspended
Paso Robles Synd., No. 1 Creston, San Luis Obispo Co.	27-27-11	3,941	cleaning out
Potter, F. J., No. 1 Atascadero, San Luis Obispo Co.	24-28-12	....	grading
Union, No. 1 King City, Monterey Co.	8-22- 8	3,250	suspended
Standard, No. 1 King City, Monterey Co.	23-22- 7	5,050	hd. sd. drilling
O'Donnell, J. E., No. 1 Dudley Ridge, Kings Co.	7-23-20	4,310	suspended
Penn Western, No. 1 Tulare Lake, Kings Co.	24-21-18	1,338	suspended
Wellport Oil Co., No. 1 Devils Den, Kings Co.	9-24-17	3,940	suspended
Tenn State Oil Co., No. 1 Point Arena, Mendocino Co.	14-12-17	4,135	hd. sd. drilling
Oakdale Oil Co., No. 1 Oakdale, San Joaquin Co.	3- 2-10	3,535	suspended
Orinda Pet., Well No. 1 Contra Costa Co.	32- 1- 3	604	sd. sh. drilling
White, Roy, No. 1 Pixley, Tulare Co.	8-23-26	4,022	suspended
Terra Bella Oil Co., No. 1 Porterville, Tulare Co.	35-22-27	912	testing
Western Oil Co., No. 1 Porterville, Tulare Co.	35-22-27	1,022	granite
Cons'd Properties, No. 1 Porterville, Tulare Co.	35-22-27	993	granite-drlg
Terra Bella Drlg. Co., No. 1 Porterville, Tulare Co.	34-22-27	925	cemented
Payatt Oil Co., No. 1 Porterville, Tulare Co.	34-22-27	rig	suspended
Turner Oil Co., No. 1 Porterville, Tulare Co.	34-22-27	692	sd. sh. drilling
Larson Oil Co., No. 1 Porterville, Tulare Co.	11-23-27	211	sd. drilling
Colusa Oil Co., No. 1 Bush, Colusa Co.	31-15- 4	680	hd. sd. drilling
Getty Oil Co., No. 1 Nigger Heaven, Yolo Co.	23-12- 3	mtl.	building rig

Pipe Line Construction News

Quarter of Billion For Gas Lines Figured By Bureau of Mines

Construction of pipe lines for natural gas and the manufacture of pipe for the systems promises to be one of the major industrial developments of the year, it was stated on behalf of the Bureau of Mines, Department of Commerce. Expenditures for long-distance lines to transport natural gas alone may reach $250,000,000 for the year, it was explained.

Manufacture of the pipe for such lines has been one of the chief activities of the iron and steel industry. Improvement in pipe so as to enable it to withstand high pressure and better methods of welding which make lines nearly leakproof have been partly responsible for the growth of pipe lines within the last few years, it was stated.

Natural gas lines planned or under contemplation, it was pointed out, include one from the Texas Panhandle to Chicago, extensions to various points of the line from Monroe, La., to Atlanta, a second line from the Kettleman Hills Field to San Francisco, possibly a line from the Texas Panhandle to Indianapolis, perhaps extensions of existing lines to serve Washington and cities along the Atlantic Coast, and a line to Butte and Anaconda, Mont., from fields in north central Wyoming or possibly from fields in Canada.

In addition, a gasoline line is being built from Marcus Hook, near Philadelphia, to Toledo, it was pointed out. Work is ready to start on a gasoline line connecting refineries in Oklahoma and Kansas with consumers in the Chicago-Milwaukee area.

The latter will be a co-operative line, it was explained. It will be used by Continental and Barnsdall and possibly two or three other refining companies. Perhaps half the freight cost will be saved through use of the line, the saving amounting to several cents on a gallon on some shipments.

Furthermore, a crude oil line is being laid from Oklahoma to Wood River, Ill.

Among the natural gas lines completed recently were those connecting the Panhandle and Denver, the Monroe Field with Atlanta, Monroe and St. Louis, Lea, N. M., and El Paso, the Panhandle and Monterrey, Mexico, the Kettleman Hills Field, and San Francisco, and Baxter Basin, Wyo., and Salt Lake City.

An idea of the cost and size of such undertakings may be had from expenditures for some of these lines, it was pointed out. The line from the Panhandle of Texas to Denver cost approximately $22,000,000. The line between Monroe, La., and Atlanta, with its branch lines, was constructed for around $30,000,000. It cost about $25,000,000 to lay the line supplying the St. Louis industrial district with gas from Monroe.

Around $15,000,000 was expended for the line between Lea, N. M., and El Paso. The cost of building a line from the Laredo district to Monterrey was about $4,500,000. The line supplying San Francisco from the Kettleman Hills Field cost in the neighborhood of $25,000,000. The Baxter Basin-Salt Lake City line represents an expenditure of about $24,000,000.

Pipe lines represent the only feasible means of transporting natural gas, whereas with liquids such as crude oil and gasoline they usually represent the cheapest form of transportation. There are probably 80,000 miles of natural gas lines in the country now, it was stated.

It is estimated that last year the consumption was perhaps 15 per cent greater than in 1928, and the total value of the gas used was proportionately higher.

ANNOUNCE $12,000,000 GAS LINE FROM KENTUCKY TO INDIANA

CHICAGO, Aug. 16.—The Central Public Service Corp. has entered into the production and piping of natural gas and will construct a $12,000,000 pipe line from the eastern Kentucky natural gas pool into the company's Indiana territory, a distance of 260 miles, it was announced by Albert E. Peirce, president of the company.

This line will be designed to provide an additional gas supply to the industrial interests served by the Central Indiana Gas Co., a subsidiary of Central Public Service. Heretofore, the properties of the corporation and its subsidiaries have been large distributors of natural gas, but not producers.

The expansion is made possible as the result of an affiliation with the H. M. Byllesby interests, who have granted to Central Public Service full production rights in a substantial portion of the thousands of acres of natural gas lands owned by them in eastern Kentucky. This pool is one of the largest in the United States, having for many years served Pittsburgh, Louisville and intervening points with natural gas. The contract just executed will give Central Public Service a large supply and reserve of natural gas.

Construction of the 18-inch steel welded line will be started immediately and already substantial contracts have been secured from the many industrial plants in southeastern Indiana. Contracts have been taken in the name of Public Service Engineering Co., a wholly owned subsidiary of Central Public Service Corp., which will function until the physical and corporate structure of the new pipe line organization is completed. The parent company will in the near future form a pipe line company, which will undertake public financing through the medium of senior securities.

Mr. Peirce in making the announcement of the entrance into the natural gas field pointed out that the move was in line with the trend recently adopted by the major public utility organizations generally throughout the country to engage directly in all phases of the industry, rather than to confine themselves to distributing.

"While our Indiana line will rank with some of the largest in the country used for direct distribution, I wish to emphasize that we are not entering the business for any purpose other than to serve our existing territories," Mr. Peirce said. "It is designed to give the industries in our territory better service, and we intend to confine our activities principally to that territory and to serve such other interests as may demand service from the pipe line company."

Central Public Service Corp. through subsidiaries, operates in 471 communities in 24 states and two Canadian provinces, serving an estimated population of 3,200,000 with gas, electricity, power, transportation, water and ice.

SOUTHERN UNION GAS EXTENDING PIPE LINES

DENVER, Colo., Aug. 16.—The sale of the Ute Indian lease on the Barker Dome, San Juan County, New Mexico, to the Southern Union Gas Co. is expected to be followed by the development of gas reserves for the various pipe line projects of that concern. The lease comprises approximately, if surveyed, W half NW, Section 23; W half W half, Section 14; Sections 15, 16, 17, 20, 21 and 22; NE NE, Section 29; N half NE SW, Section 28; NW, Section 27, all in Township 32n, Range 14w. This tract was purchased at auction on October 15, 1923, by the Gypsy Oil Co., which drilled a well in the C NE, Section 16-32-14, to the McElmo formation at 3,343 feet where it was plugged and abandoned. It had about 10,000,000 feet of gas per day in the Dakota, but there was no market for this gas at the time the company surrendered its lease. The tract adjoins the holdings of the Midwest Refining Co. and the Producers & Refiners Corp. on the Ute structure upon which are three wells which came in for 37,000,000 to 72,000,000 feet per day each. The Midwest has contracted the sale of its gas to the Southern Union company and the last named concern purchased the lease of the Producers & Refiners Corp.

Southern Union Gas Co. is conducting an aggressive gas program in the Rocky Mountain area. It is building a 300-mile line from northwestern New Mexico to Albuquerque, Las Vegas, Santa Fe and Belen to supply those towns with natural gas. This line, which crosses the Continental Divide, involves some unusual problems on account of its location away from the beaten paths. It has had to build or is building 40 bridges with its road construction, goes through canons and over mountain ranges, water has to be hauled to the camps, and numerous other difficulties have to be faced. The company last year bought from the Hope Engineering Co. its line from the Ute wells to Durango and the distributing system in that town, and also supplies Farmington with natural gas. Farther to the north in Colorado it was working on a project for supplying the towns of Grand Junction, Fruita, Palisades, Delta, Montrose and Olathe, though no committments have yet been made nor the source of gas disclosed. Farther to the east it has a franchise for supplying the town of Rifle with gas from Piceance Creek where the Magnolia Petroleum Co. has a gas well, this project calling for a 60-mile line and including Newcastle and other towns in the program. Still farther north in Moffat County it has negotiations under way for a franchise to supply the town of Craig with gas from the Midwest Refining Co.'s discovery well on the Bell Rock structure. This will involve only 9 miles of construction.

PHILLIPS LINE CONTRACT

Construction work on the first part of the Phillips Petroleum Co.'s gasoline line started August 10 at Borger, Tex., and at Loverne, Harper County, Oklahoma. Kelly-Dempsey Co. of Tulsa were awarded the contract for the 900-mile line, which will start at Borger, Tex., and run through Kansas City, Mo., to St. Louis. Other camps will be located along the right of way in the near future.

LEERAY FIELD LINE

FORT WORTH, Tex., Aug. 18.—The Lone Star Gas Co. is building a new compressor station in the Leeray Field, Stephens County, which will be completed about September 15. It will have three 160-horse power units. Five 160-horse power units are being installed at the Joshua compressor station of the company to enable the company to take more gas from the two 18-inch lines running from the gas fields to the west. A new 12-inch line 20 miles long is about completed, connecting the Ranger and Pueblo stations. This line parallels the company's 10-inch line between these points. It will be used as a high pressure line to pick up gas from high pressure wells along the way.

PIPE ORDER PLACED FOR ALABAMA LINES

By B. E. V. Luty

PITTSBURGH, Pa., Aug. 18.—Not much additional line pipe business has been placed lately, but makers are well engaged on old orders and expect much more business to come to a head, as there are various promising projects, chiefly for natural gas. The chief concern of producers, indeed, is to step up production. Lapweld furnaces, using the old process, for large diameter pipe are fully engaged. New seamless tube mills are gradually increasing production. National's new electric weld department is producing in a commercial way but is not yet close to its eventual capacity, while Youngstown Sheet & Tube Co.'s new department has encountered some delays and has not yet got into commercial production, though it probably will within a week or so.

The Southern Natural Gas Co. of Alabama has placed an order for 60 miles of 12-inch line pipe with the Republic Steel Corp. The Columbia Gas & Electric Corp. has published an announcement that it will build a gas line from its West Virginia and Ohio fields to the Atlantic Seaboard, a considerable part of the line being in two parallel 24-inch lines. The Moody-Seagraves Corp. contemplates a line from the same fields to the Great Lakes, while the Sun Oil Co. is negotiating for pipe for its gasoline line from Philadelphia to Syracuse, N. Y.

Steel ingot production in July was officially reported at 56.35 per cent of capacity. There was no observable upward or downward trend in the rate during the month, and none has been seen thus far this month. After declining production for fully four months the arrest is encouraging in a way, but on the other hand the four years of the past seven that had an autumn increase in production showed the increase for August, and increased buying must precede increased production while thus far there is no increase to be seen. One steel company reported its week's bookings as the smallest since 1922, while some others may show increases, buying being naturally spotty.

The Steel Corporation's unfilled obligations increased 53,991 tons during July, after losses during the three preceding months totaling 502,589 tons. Bookings were about the same in July as in the three months preceding, while shipments were materially lighter, at about 63 per cent of capacity. In the past July has shown decreases sometimes and increases other times, there being no definite seasonal character to the month. How little precedent counts is shown by the fact that in 1927 July showed an increase whereas the second half of that year was a poor one, while in 1928 July showed

(Continued on Page 113)

OPPOSE WYOMING-MONTANA LINE

CASPER, Wyo., Aug. 16.—Continental Oil Co. has filed objections with the Wyoming Public Utilities Commission against granting the Wyoming-Montana Pipe Line Co. permission to construct an oil pipe line from Hamilton Dome Field in Hot Springs County, Wyoming, to Billings, Mont. Commission has postponed public hearing on the application of the pipe line company to lay the line to August 25.

PROGRESS ON HOBBS LINE

The Texas Pipe Line Co. has started to work on looping its 6-inch line from Jal to Eunice, in Lea County, with an 8-inch line, and will then run a 6-inch line from Eunice to the Hobbs Field. About 10 miles of pipe have been laid through Texas.

Proration Plans in Crane and Upton

Problem One of Getting the Oil Run. Blanket Price Criticised. Penn Pool Gets Its Best Well. Ector County Test

By L. E. Bredberg
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., Aug. 18.—Representatives of producers and operators in Crane and Upton Counties met at Fort Worth today to discuss proration of fields in those counties, namely the Church and Fields and McElroy Pools in Crane County and the McCamey, Taylor and Sapp Pools in Upton County. L. E. Barrows, division manager of The Texas Company, Fort Worth, is chairman of the executive committee of these pools, as well as the Winkler County Committee, and has appointed W. L. Todd, vice president of the Simms Oil Co., Dallas, and James R. Gahan of the Tidal Oil Co., Fort Worth, to act on the committee.

Plans for the reduction of these fields comes as a preparatory move to the statewide meeting in Austin on August 25, and the committee perfected a plan to curtail these fields to 10,000 bbls. daily, less than one-fourth of its present daily production. The Church and Fields Pools will be cut 64 per cent and the McCamey-Taylor Pools cut 47 per cent. In the Church and Fields and McElroy Pools the minimum well basis is 50 bbls., and in the McCamey-Taylor-Sapp Pools the minimum well basis is 25 bbls., due to the latter fields being almost flooded with water, and the wells in these fields being older and producing less on the average than in the former pools.

If a well makes more than the minimum allowance, the difference between its actual production and the minimum figure will be prorated. That is, if a well produces 60 bbls. in the Crane fields the proration factor, 64 per cent, will be applied only to the 10 bbls. which it makes above the 50-bbl. minimum. This would give an allowance of about 56.5 bbls. for such a well.

The committee will work out fair conditions for all necessary cases, and will decide as to the necessity of future wells. The order for these fields will go into effect August 27, when the general order of the Railroad Commission goes intc effect, and the committee will operate under the Railroad Commission's orders.

Ray Richmond to Be Umpire

Umpire Ray Richmond of the Yates Field will be umpire in charge of the Crane-Upton areas, and Mr. Capers, in charge of Winkler County, will take over umpiring duties of the Penn Pool, Ector County, which duties Mr. Richmond has been carrying along with his Yates Field work.

In the Crane County fields there are 305 producing wells making 34,165 bbls. daily. Of this number of wells, 140 average 50 bbls. or less, an average of 26 bbls. per well. Seventy-four wells make 25 bbls. daily or less, averaging 16 bbls. per well per day.

In the Upton County fields there are 280 producing wells making 7,870 bbls. per day. Of these, 241 make less than 50 bbls. per day, and 197 average less than 25 bbls. per day. The average of the former is 14.5 bbls., and for the latter 197 wells it is 9 bbls.

Immediately after the meeting of the Crane-Upton Advisory Committee, the Penn Pool, Ector County, Advisory Committee met to discuss the market outlet decrease from 10,000 bbls. to 7,000 bbls. this week, due to increases in potentials which consequently decreased the runs of the Gulf Pipe Line Co. and Cosden Oil Co.

One of the members of one of the advisory committees of the West Texas Permian Basin said the problem in proration is "getting the oil run." It is not a question of prorating it, he said, but a question of who will buy and run the oil. The blanket price for West Texas crude was cited as an evil which should be remedied, for purchasing companies would not take oil of one character or degree when it desired another of different character and degree, and the only way to remedy this selection of oil and fields was to establish a price differential on the character and gravity of oil. Several examples of choosing different oil and fields in which to buy oil have come up in Texas, and a differential price might solve the problem of cutting down the choosing of different oils as some of the purchasers now do.

Andrews County Tests

The Fuhrman Petroleum Co. has recovered the tools in its No. 1 Ford, the recently encountered gasser in Section 16, Block A-43, Andrews County, and will resume drilling at once. Water was used twice to kill the gas, but failed both times, and then mud was resorted to and did the work. The well tests 26,000,000 feet of gas, and never made as high as 50,000,000 as reported previously. Many estimates were made as to its gas capacity, the majority running to the extreme. Total depth of the hole is 4,067 feet and the gas was encountered at 4,062 feet.

Southern Crude Oil Purchasing Co.'s No. 1 J. W. Cowden, located 2,310 feet from the north and 330 feet from the west of Section 26, Block 34, Public School Lands, in the northern part of Ector County encountered an estimated 50,000 feet of gas at 3,943 feet, and boosted the price of acreage between it and the Fuhrman well to the north, considerable, although there was but little acreage left open in this area, which is the most interesting spot in the Permian Basin at the present time.

Crane County Location

Cranfill Brothers have announced location for their No. 1 J. T. Muir, 2,310 feet from the west and 330 feet from the north of Section 23, Block B-27, in Crane County, on land which was donated by the Pure Oil Co., on which the lease expires January 8, 1931. Disney & Gholson will drill the well, which will be in an area which is looked upon as highly favorable from a geological standpoint, and near the Cranfill Brothers and Gulf Production Co.'s No. 1 Tubbs, in Section 8 of the same block and survey, which encountered several gas showings, the largest estimated at 6,000,000 feet, struck at 2,930 feet. Tools are stuck in this hole at 3,903 feet. Total depth is 3,993 feet.

Phillips Petroleum Co.'s No. 1 Whitten in Section 35, Block LL, T.C. Survey, Schleicher County, was shot again, this time with 50 quarts from 6,308-37 feet, but of no avail, and it will probably be plugged back to around 4,500 feet, where it had a good oil showing, and be shot once more in an effort to make a commercial producer out of it.

WEST TEXAS PRODUCTION
Week Ended August 16

County—	No. wells	Prod.
Andrews	2	119
Crane	352	31,855
Crockett	48	1,850
Ector	56	10,565
Fisher	7	1,729
Garza	5	29
Howard-Glasscock	521	23,537
Irion	5	160
Jones	73	1,353
Loving	24	1,714
Mitchell	146	2,125
Pecos	488	107,125
Reagan	258	21,580
Runnells	3	12
Scurry	5	13
Taylor	2	73
Upton	250	7,460
Ward	34	2,840
Winkler	595	78,005
Total production this week		292,144
Total production last week		293,793
Decrease		1,549

Penn Pool's Best Well

The Penn Pool, Ector County, registered its best well since the discovery of the Pool, when Humble Oil & Refining Co.'s No. 1-D Kloh and Rumsey, 1,695 feet from the south and 1,320 feet from the west of Section 7, Block 44, inside of the pool, topped the pay at 3,646 feet and was bottomed at 3,685 feet. It gauged 2,250 bbls. flowing open for 12 hours and on a 61/64-inch choke for 12 hours.

R. R. Penn and others' No. 1 Kloh-Rumsey, 330 feet from the north and 2,310 feet from the east of Section 19, Block 44, Township 3s, southeast of the Penn Pool, is shut down at 2,540 feet and will probably be plugged. This is an outpost well and definitely defines the pool in that direction.

It will be interesting to many to note that 14 wells in the Big Lake Field, Reagan County, were plugged this week after having been producing for several years. The completion report will give the number of the well, date it was completed, initial production and total depth. Thirteen belonged to the Big Lake Oil Co. and one to the Texon Oil & Land Co.

WILDCAT OPERATIONS IN WEST TEXAS

Week Ended August 18

Company, well, farm name, section and block—	Remarks—
ANDREWS COUNTY	
Deep Rock Oil Co. et al's No. 1 Mathis, 900 ft. from S and W, Sec. 4, Blk. A-46, Public School Land	Swabbed 100 bbls.; swabbing dry; shot with 160 qts. from 4,168-4,232 ft.; total depth 5,088 ft.
Deep Rock Oil Co.'s No. 1 Miles, 900 ft. S, 1,650 ft. E of NW cor., Sec. 22, Blk. A-46, School Land	Shut down 4,765 ft.
Fuhrman Pet. Corp.'s No. 1 Ford, 440 ft. from S and 2,200 ft. from W of Sec. 16, Blk. A-43, Public School Land	Fishing 4,068 fct.
Deep Rock Oil Co. et al's No. 1 King, 330 ft. from N and 2,310 ft. from E, Sec. 11, Blk. A-46	Top pay 4,335 ft.; 3,500 ft. oil in hole; total depth 4,464 ft.
Maer & Sanforth's No. 1 Meador, C SW Sec. 8, Blk. A-41	Drlg. 2,535 ft.
R. R. Penn's No. 1 Wilson, C Sec. 20, Blk. A-37, School Land	Drlg. 4,715 ft.
BREWSTER COUNTY	
Brewster Oil Co.'s No. 1 fee, 2,640 ft. S and 2,598 ft. E of NW cor., Sec. 45, Blk. G-15, G.C.&S.F. Sur.	Shut down 1,935 ft.
E. L. Chapman's No. 1 Skinner, C SW SE Sec. 100, Blk. 2, G.C.&S.F. Sur.	Shut down 1,302 ft.
Trans-Pecos Oil & Gas Co.'s No. 1 Jones, 920 ft. from N and 2,500 ft. from E of Sec. 18, Blk. G-15, G.C.& S.F.R.R. Sur.	Drlg. 2,500 ft.
Van McPhail's No. 1 McIntyre, SE cor. Sec. 59, Blk. 352, 7 mi. S of Alpine	Shut down 1,750 ft.
COKE COUNTY	
Arkansas Fuel Oil Co.'s No. 1 Stepp, 1,020 ft. NE, 2,340 ft. W of SE cor. Sec. 35,, Blk. 1-A. H.&T.C. Sur.	Shut down 4,020 ft.
CONCHO COUNTY	
Beesley et al's No. 1 S. Waring Est., 1,320 ft. from S and E of A. T. Robinson Sur., Abst. 2,120	Spudded.
Turner et al's No. 1 Borsig, 150 ft. from S of NE cor., G. Emmig Sur. 130, 6 mi. W of Paint Rock	Shut down 1,550 ft.
CRANE COUNTY	
Cranfill Bros. and Gulf's No. 1 J. B. Tubb, 2,310 ft. from N and 330 ft. from E of Sec. 8, Blk. B-27, Public School Land	Fishing 3,993 ft.

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COMPLETIONS IN WEST TEXAS

Week Ending August 16

Crockett County

The California Oil Co.'s No. 3 Shannon, top pay 2,536 feet, initial production 350 bbls. on pump, total depth 2,582 feet.

Ector County

Humble Oil & Refining Co. and others' No. 10-D Kloh and Rumsey, top pay 3,646 feet, initial production 2,250 bbls., 12 hours open and 12 hours through sixty-one-sixty-fourth-inch choke, total depth 3,685 feet.

Fisher County

Cranfill & Reynolds' No. 2 Barrett, top pay 3,100 feet, initial production 400 bbls., total depth 3,109 feet.

Gaines County

Humble Oil & Refining Co.'s No. 1 Corswell, dry and abandoned, total depth 4,835 feet.

Irion County

Carl Cromwell and others' No. 2 Tankersley, dry and abandoned, total depth 1,635 feet.

Mitchell County

The California Oil Co.'s No. 9 Foster, dry and abandoned, total depth 2,935 feet.

Pecos County

McCurdy and Brown's No. 1 Tippett, top pay 455 feet, initial production 15 bbls., total depth 485 feet.

Reagan County

Big Lake Oil Co.'s No. 4 University, plugged, total depth 3,086 feet, formerly completed for 200 bbls., May 12, 1924. Same company's No. 5 University, plugged, total depth 2,987 feet, formerly completed for an initial production of 1,971 bbls. on March 3, 1925. Same company's No. 12, plugged, total depth 3,050, feet, formerly completed for an initial production of 1,701 bbls. on October 28, 1924. Same company's No. 19 University, plugged, total depth 2,929 feet, formerly completed for an initial production of 5,673 bbls. on May 28, 1925. Same company's No. 20 University, plugged, total depth 2,928 feet, formerly completed with initial production of 2,999 bbls., on August 31, 1925. Same company's No. 23-A University, plugged, formerly completed with initial production of 155 bbls., total depth 2,473 feet, completed February 13, 1926. Same company's No. 28 University, plugged, total depth 3,005 feet, formerly completed with initial production of 509 bbls., on July 7, 1925. Same company's No. 29 University, plugged, total depth 3,041 feet, formerly completed with initial production of 74 bbls., June 24, 1925. Same company's No. 52 University, plugged, total depth 2,962 feet, formerly completed with initial production of 400 bbls., on February 26, 1926. Same company's No. 54 University, plugged, total depth 3,070 feet, formerly completed with initial production of 2,600 bbls., on January 23, 1926. Same company's No. 69 University, plugged, total depth 3,155 feet, formerly completed with initial production of 125 bbls. on August 2, 1926. Same company's No. 77 University, plugged,

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North Texas Prepares for Curtailment

Another Area Opened for Deep Production in Southern Young County and Prospect of Extension of New Pool in Another Section

By L. E. Bredberg
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., Aug. 18.—Panhandle, Wichita Falls and Ranger operators have been busy during the past two weeks getting plans arranged for the curtailment of their respective fields when the general proration order of the State of Texas goes into effect August 27, and preparatory arrangements have no doubt had large influence upon the big decrease in locations and activities in these districts this week. Proration is doubtlessly having a pre-effect here.

Plans for prorating the Panhandle district are published elsewhere in this issue of The Oil and Gas Journal, and at a meeting of oil producers of the Ranger district, August 15, a committee of five was appointed to work with the central committee of the State on the program recommended by the Railroad Commission for this district. The committee is composed of John H. Gholson, Ranger, chairman; J. T. Anderson, Cisco; H. P. Evans, Brownwood; Dr. E. R. Riggs, Graham, and John M. Mouser of the Prairie Oil & Gas Co., Eastland.

County chairmen to represent the counties in this district are: M. G. Cheaney, Coleman and Runnels Counties; W. G. Sawyer, Brown; W. V. Conway, Eastland; R. W. Moultry, Callahan; George Callahan, Shackelford; Terry West, Stephens; L. G. Harper, Jack and Palo Pinto; Bert Wisley, Throckmorton. A Young County chairman is to be named later. These men will determine the amount of cut that is to be made in each county in the district and will report to the committee of five, which in turn will report to the central committee.

Opens New Area

Nash & Windfohr's No. 1 Graham, in the Allen Hines Survey, 10 miles south of New Castle, in southern Young County, a rank wildcat well, has been completed for an initial production of 35 bbls. this week. Total depth is 3,784 feet, but it was plugged back to 3,625 feet. Top of the pays was found at 3,030-45 feet, 3,080-90 feet and 3,105-22 feet. This well encountered these deep pays about three weeks ago, but was just put on the pump and production this week, opening up another area to deep production in this county.

T. B. Slick's No. 1 Robertson, in the J. H. Robertson Survey, Abstract 2175, 4 miles northeast of Graham, encountered an oil sand from 3,560 to 3,581 feet, filled up 900 feet with oil in 24 hours, but under a test the sand did not show enough oil to make a commercial producer. It was carried down to 3,814 feet from 3,810 feet, where it hit 2,000,000 feet of gas. It is now being slowly drilled ahead, and has chances of extending production of the Graham Pool, or opening a separate and distinct pool.

Still another part of Young County looked as if it was due to get an extension of production or another pool in Tower & McKanna's No. 1 Jeffrey, in Section 42, T.E.&L. Survey, 3½ miles northwest of the Riggs or Larimore Pool, approximately 8 miles northwest of New Castle. It topped the shallow sand at 749 feet and was shut down at 752 feet, swabbing 8 bbls. of oil in 3 hours. It is now being cleaned out to go on the pump, and is estimated good for a 15 or 20-bbl. pumper.

Clyde Ransburger of Coleman has blocked 8,700 acres about 5 miles southwest of the town of Hamilton, in Hamilton County, and Jim McCamey will drill a well on the block, for a reported $5,000 and a three-quarters interest in the block, with the exception of two offsets and 100 acres each retained by Ransburger. The well will be carried under the name of McCamey's No. 1 G. R. Edson. It will be located 2,243 feet from the north line and 777 feet from the east line of the Merryman Survey, and will be a 3,500-foot test.

The George Pool, Brown County, produced 297 bbls. per day during the past week, and the Overall Pool produced 448 bbls. The latter pool is in Coleman County.

PANHANDLE DISTRICT

Carson County

Shamrock Oil & Gas Co.'s No. 1 Thompson, total depth 3,404 feet, plugged back to 2,995 feet, initial production 17,000,000 feet of gas from 2,755-2,995 feet.

Collingsworth County

Shoup Brothers' No. 1 Whitson, abandoned, location.

Gray County

Adams, Prince & Tharp's No. 1 Morse (Cantone), top pay 2,487 feet, initial production 150 bbls.; total depth 2,540 feet. Cockrell-McIllroy's No. 1 Horner, top pay 3,210 feet, shot with 200 quarts from 3,190-3,251 feet, initial production 360 bbls.; total depth 3,251 feet. Empire Gas & Fuel Co.'s No. 1-C Archer, top pay 3,185 feet, shot with 100 quarts, initial production 250 bbls.; total depth 3,243 feet. Humble Oil & Refining Co.'s No. 8 Combs & Worley, 12,000,000 feet of gas from 2,748-2,806 feet, top pay 2,855 feet, initial production 790 bbls.; total depth 2,860 feet. Magnolia Petroleum Co.'s No. 7 Faulkner, total depth 2,725 feet, plugged back to 2,722 feet, top pay 2,710 feet, initial production 15 bbls. oil and 15 bbls. of water in 24 hours. Magnolia Petroleum Co.'s No. 8 Faulkner, top pay 2,833-43 feet, initial production 555 bbls. with 5,000,000 feet of gas; total depth 2,920 feet. Operators Oil Co.'s No. 3 Bowers (Texmore), initial production 15,000,000 feet of gas from 2,760-2,880 feet; total depth 2,930 feet. Prairie Oil & Gas Co.'s No. 1 Carey, top pay 3,235 feet, initial production 115 bbls.; total depth 3,317 feet.

Wheeler County

Lone Star Gas Co.'s No. 1 Ritchey, initial production 64,000,000 feet of gas from 1,798-2,012 feet, total depth 2,012 feet. Long and others' No. 1 Willington, initial production 14,000,000 feet of gas from 1,9701-2,175 feet; total depth 2,175 feet. Murchison & Fain's No. 1 Grogan, initial production 51,000,000 feet of gas from 1,224-1,502 feet; total depth 1,508 feet. Murchison & Fain's No. 2 Purcell, initial production 46,000,000 feet of gas from 1,562-1,959 feet; total depth 2,461 feet. Upham Gas Co.'s No. 1 Williams & Lay Cocks, initial production 33,000,000 feet of gas from 1,840-1,954 feet; total depth 1,954 feet. Wischkamper's No. 4 Curry, initial production 3,000,000 feet of gas from 1,445-1,593 feet; total depth 1,605 feet.

WICHITA FALLS DISTRICT

Week Ending August 16

Archer County

Beard & Hammond's No. 1 Terrell, dry and abandoned, total depth 803 feet. F. P. Cullum's No. 4-A Falls County School Lands, dry and abandoned; total depth 900 feet. Steele Drilling Co. and King Royalty Co.'s No. 1 Chancelor, dry and abandoned; total depth 1,501 feet. Steele Drilling Co. and King Royalty Co.'s No. 1 Ward Brothers, dry and abandoned; total depth 1,000 feet.

Clay County

Temple and others' No. 1 Edrington estate, dry and abandoned; total depth 1,158 feet.

Grayson County

C. E. Marshall and others' No. 1 Taylor, dry and abandoned; total depth 1,018 feet.

Wichita County

Pat Flynn's No. 1 Woodward, dry and abandoned; total depth 3,695 feet.

Wilbarger County

Hoover Scientific Development Co.'s No. 1 Waggoner, dry and abandoned; total depth 2,070 feet. McCarty Oil Co.'s No. 1 Waggoner, dry and abandoned; total depth 2,443 feet. Phillips Petroleum Co.'s No. 4 Waggoner, top pay 2,549-56 feet, initial production 50 bbls.; total depth 2,563 feet. Rigg's No. 1 Parsley, dry and abandoned; total depth 2,515 feet. Zenith Oil Co.'s No. 4 Dill and others, dry and abandoned; total depth 2,236 feet.

Young County

Long and others' No. 1 Fawks, total depth 3,912 feet, plugged to 3,870 feet; shot with 30 quarts from 3,507-15 feet; initial production 20 bbls.; top pay 3,753-84 feet. Nash & Windfohr's No. 1-B Ware, total depth 3,784 feet, plugged back to 3,625 feet, top pay 3,030-45 feet, 3,080-90 feet and 3,105-22 feet, initial production 35 bbls. Ard & Son's No. 1 Terrell estate, top pay 689 feet, initial production 7 bbls. oil and 10 bbls. water, total depth 693 feet. Continental Oil Co.'s No. 1 Whileley, dry and abandoned; total depth 5,063 feet. Lindsey Drilling Co.'s No. 1 Lisle, dry and abandoned; total depth 1,130 feet. McDonald & Campbell's No. 1 Van Hewett, dry and abandoned; total depth 760 feet. McMeans & Williams' No. 1 Kay and others, dry and abandoned; total depth 598 feet. McMeans & Williams No. 1 Sparks, dry and abandoned; total depth 557 feet. George L. Pace's No. 1 Winkler, dry and abandoned; total depth 1,305 feet. Paramount Oil & Refining Co., Inc.'s No. 1 Choote, dry and abandoned; total depth 700 feet. A. H. Park's No. 1 Wallace, dry and abandoned; total depth 600 feet. States Oil Corp.'s No. 1 McGee, dry and abandoned; total depth 4,215 feet. Sid Swink's No. 1 Belknap Coal Co., top pay 678 feet, initial production 8 bbls.; total depth 718 feet. T. E. Funick and others' No. 1 Routin, dry and abandoned; total depth 760 feet. Watson and others' No. 1 Watson, dry and abandoned; total depth 700 feet. Willis & Terrell's No. 1 Cathright, dry and abandoned; total depth 752 feet. Wise & Jackson and Devonian Oil Co.'s No. 1 Brown, dry and abandoned; total depth 976 feet.

NORTH TEXAS PRODUCTION

Week Ending August 16

Panhandle district—	Barrels
Carson County	9,270
Hutchinson County	20,150
Gray County	69,310
Moore County	345
Potter County	10
Wheeler County	625
Total this week	99,710
Total last week	97,725
Increase	1,985
Wichita Falls district—	
Archer County	16,985
Baylor County	915
Clay County	696
Cooke County	3,234
Foard County	175
Jack County	2,545
Haskell County	54
Montague County	6,726
Throckmorton County	773
Wilbarger County	22,804
Wichita County	25,241
Young County	14,730
Total this wek	94,878
Total last week	94,621
Increase	257
Ranger district—	
Brown County	5,942
Callahan County	3,201
Coleman County	2,876
Comanche County	1,182
Palo Pinto County	525
Eastland County	4,471
Shackelford County	6,997
Stephens County	5,558
Total this week	30,752
Total last week	30,384
Increase	368

RANGER DISTRICT

Brown County

Anna B. Gordon's No. 7-A Cannon, top pay 1,196 feet to 1,207 feet; shot with 3 quarts and 4 quarts from 1,200-8 feet, initial production 4 bbls.; total depth 1,213 feet. Nimrod Oil Co.'s No. 2 Leslie, top pay 1,344 feet, initial produc-

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WILDCAT OPERATIONS IN TEXAS PANHANDLE

Week Ending August 18

CARSON COUNTY

Company, well, farm name, section and block—	Remarks—
Danciger O. & R. Co.'s No. 1 Block, 330 ft. N and E lines, Sec. 112, Blk. 4, I.&G.N. Sur.	T.P. 3,021 ft; T.D. 3,077 ft; shot with 180 qts. 3,020-77 ft; swbng. 90 bbls. daily.
Gibson Oil Corp.'s No. 1 Moore, 990 ft. N, 330 ft. E, N½ SE, Sec. 20, Blk. 7, I.&G.N. Sur.	Fishing 3,335 ft.
North American Oil Co.'s No. 1 Burnett, C NW, Sec. 97, Blk. 4, I.&G.N. Sur.	Rigging up.
North American Oil Co.'s No. 1 Burnett, C SE, Sec. 98, Blk. 4, I.&G.N. Sur.	Rig.
Reiger & Steckoll's No. 1 Martin, 330 ft. N and W, SW, Sec. 90, Blk. 7, I.&G.N. Sur.	12,000,000 ft. gas 2,815-2,910 ft.; S.D. 2,950 ft.
Shamrock O. & G. Co.'s No. 1 Duncan, 330 ft. S and W, NE, Sec. 5, Blk. 7, I.&G.N. Sur.	Location.
Suloch Oil Co.'s No. 1 Bost, 990 ft. S, 330 ft. E, SW, Sec. 1, Blk. S.&F.	S.D. 3,240 ft.; to plug back for gas.
Sweeney et al's No. 1 Locke, 164 ft. N and W 40-ac. tr. along R.R. in Sec. 57, Blk. 7, I.&G.N. Sur.	S.D. 1,000 ft.
Texas Interstate P. L. Co.'s No. 1 Burnett, C SW, Sec. 6, Blk. 5, B.&B. Sur.	Drlg. 1,040 ft.
Texas Interstate P. L. Co.'s No. 2 Burnett, C NE, Sec. 77, Blk. 5, I.&G.N. Sur.	S.D. 2,690 ft; 41,000,000 ft. gas.

CHILDRESS COUNTY

C. L. Sloane et al's No. 1 B. P. Smith, Sec. 49, F. P. Knott lands	T.D. 5,000 ft.

COLLINGSWORTH COUNTY

Dixon et al's No. 1 Bell, 330 ft. N, 1,320 ft. W, Sec. 102, Blk. 21, H.&G.N. Sur.	Location.
Shoupe Bros.' No. 1 Aldus, 410 ft. N, 330 ft. E, Sec. 96, Blk. 16, H.&G.N.R.R. Sur.	Show oil and gas 1,678 ft.; drlg. 3,150 ft.

DONLEY COUNTY

Blue Bonnett Oil Co.'s No. 1 Ball, 1,075 ft. N line, 985 ft. E line, Sec. 22, Blk. E, D.&P.R.R. Sur.	T.D. 3,006 ft.; contract depth.

GRAY COUNTY

Amalgamated German-American Oil Co.'s No. 1 Webb, 330 ft. S and W, E½ NW, Sec. 12, Blk. A-9, H.& G.N. Sur.	S.D. 1,200 ft.
Anderson & Bean's No. 1 Thompson et al, 330 ft. S and W, NW, Sec. 126, Blk. 3, I.&G.N. Sur.	Location.
Atlantic Oil Prod. Co.'s No. 1 Reynolds, 330 ft. N and W, NE SE, Sec. 84, Blk. 3, I.&G.N. Sur.	Location.
British-American Oil Co. and Shell Pet. Corp.'s No. 1 Smith, 330 ft. S and E, NW, Sec. 138, Blk. 3, I.& G.N. Sur.	Location.

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New Welding Process Makes Light Pipe

Electric Resistance Method Produces 16-Inch Pipe Standing 800 Pounds Working Pressure and Weighing 42.053 Pounds per Foot

By John W. Hill
Publicity Department, Republic Steel Corp.

One of the outstanding recent economic developments has been the expansion in long-distance pipe lines for gasoline and natural gas and the most important single contribution to this development has been the advance made in the art of pipe-making. Until late years the needs of the country were served by butt-welded and lapwelded pipe of various thicknesses. When engineers desired steel pipe of a size too large to be produced by the fire weld process, it was made of riveted or lock-joint plates.

The first important departure in tube manufacture came with the production of thin wall mechanical tubing such as the bicycle frame made from a pierced billet. Out of this grew the process of manufacturing seamless tubing.

With the increasing demand for pipe sufficiently strong to withstand the high pressures needed for oil and gas transportation there came developments in the manufacture of pipe by welding processes. The first was the metallic arc welding using an automatic welding head.

The latest process is that of electric resistance welding pipe, growing out of the procedure successfully used for nearly a decade in the production of mechanical tubing.

The American patents covering this process are owned and controlled by the republic Steel Corp. Patents issued to Gustav Johnston in 1921 were acquired by Steel & Tubes, Inc., Cleveland, now part of the Republic Steel Corp.

Process Developed for Larger Pipe

Steel & Tubes, Inc., developed the process commercially for mechanical tubing and with the acquisition of the patents by the Republic Steel Corp. work was begun immediately upon the development of the process for larger diameter, thicker wall pipe to meet the demand in the building industry, in the petroleum and natural gas industries and others. With this in view an experimental unit was built to produce pipe up to 7 inches in diameter and since it was completed about a year ago 2,000 miles of pipe has been manufactured and distributed in the oil and gas fields.

As a result of the success of the experimental mill the Republic Steel Corp. appropriated $8,000,000 for the building of a large plant in Youngstown, Ohio, to include mills for the production of pipe from 4 to 8 inches in diameter and another for pipe from 8 to 16 inches in diameter.

The larger of these two units was completed first and put in operation in July of this year. Following some weeks during which time the new equipment was smoothed out the mill started in production on an order for 800 miles of 8-inch pipe for the Phillips Petroleum Co. to provide for a gasoline line running from Texas to St. Louis, the largest line for this purpose yet to be placed under construction. The installation of the unit to make pipe from 4 to 8 inches is being rushed to completion. The Republic corporation has in contemplation also the construction of a unit for the manufacture of pipe up to 24 or 26 inches in order to enter the market for large natural gas line pipes.

The pipe made under the Johnston patents has met with favor for gasoline and oil because of the fact that it is free of scale and oxide both inside and out. This quality of pipe is one of its important distinctions. Moreover, tests have shown that the weld is stronger than the adjacent metal and miscroscopic photographs reveal that the structure is lacking in any high heat characteristics induced by the welding operation. The process is entirely automatic.

Tensile Strength Greater

Pipe made by the fire weld process cannot be manufactured with carbon content higher than 0.12 of 1 per cent, which gives a minimum tensile strength of about 45,000 pounds per square inch. Pipe made by the electric welding process can be produced up to 0.50 of 1 per cent, with a minimum tensile strength of not less than 80,000 pounds per square inch. Because of the fact that the pipe is formed cold from steel made in a strip mill, there is practically no variation in the wall thickness of electric weld pipe.

These features are important to the engineer designing a pipe line because it is now possible to employ lighter weights of pipe to withstand high working pressures. For example, on 16-inch pipe made by the fire weld process for 800-pound working pressure, it would be necessary to use lap-weld pipe one-half inch thick weighing 82.771 pounds per foot. Electric weld pipe can be produced in one-quarter inch wall weighing 42.053 pounds per foot and standing 800 pounds working pressure, or a difference of 40¾ pounds on each foot of pipe.

This is equivalent to a saving in steel of 157 tons per mile, amounting to approximately $11,000. The saving in freight on a mile of this 16-inch electric weld pipe, when shipped to the gas fields from northern steel-producing centers in the southwest, would amount to $2,500.

Instead of the 20-foot lengths of the older types of pipe, it is possible to produce electric welded pipe in any length, but the most practical from the standpoint of railroad transportation and handling is from 40 to 46 feet. These longer lengths constitute a further economy in laying as only 130 or 140 joints are required to the mile against 260 to 300 for the short length heavier pipe.

Raw Material is Universal Mill Plate

Raw material of the electric welding pipe mill at the Republic Steel Corp. is universal mill plate, rolled from mild open-hearth steel. The initial operation in the process is to plane edges of the plate exactly parallel and to exact width. For this reason the width of the plate is slightly wider than the theoretical circumference of the pipe. The cutting is done by a pair of slitters, a part of the huge edge planer.

Following the planing the skelp is carried down along a roll table for cleaning and there either by a pickling or sand-blasting unit all scale and oxide are removed. The skelp proceeds to a forming mill comprising a number of stands of forming rolls. These rolls continue the forming process until the pipe is approximately in its completed shape. From the forming rolls the plate passes at once onto the welding stand. Electric current is passed between two electrodes and sufficient heat is generated to fuse together the two edges of the pipe and to a continuous seam. Rollers pinch each side of the skelp and the seam at the top is straddled by a pair of hardened discs set parallel to each other. As the pipe progresses these discs rotate, making good electrical contact with the pipe below.

Alternating current of sufficient volt-

Straightening machine.

Beveling the pipe.

Welding unit.

age and amperage is present to heat the pipe joint to the welding temperature. The edges of the pipe are clean and no large flash is needed to eliminate dirt and scale in oxide form. Leaving the welding machine the pipe enters a series of sizing rolls and at the same time the welding butt is removed, producing a perfectly smooth surface inside and out and of a like appearance to the remainder of the tube.

Refined Grain Is Result

The result of the process is a very refined grain in the metal at and adjacent to the weld. Many tests have been made to the point of destruction both of mechanical tubing and line pipe made by the resistance welding process and these tests show that the weld is stronger than the other portions of the pipe. This strength, however, is not gained at the expense of ductility for the pipe withstands flanging and upsetting in a marked degree.

The mill has normalizing furnaces for heat treating high carbon open-hearth pipe and low carbon bessemer pipe. Mild open-hearth steel pipe is immediately sent after welding to a set of roller straighteners. When the pipe has been straightened each end is inspected and workmen chalk on the crop marks and after this the pipe is cut to lengths required for the particular order in production. When this is done a pair of large cutters perform the final machine work of threading the ends or beveling them for welding. Each pipe is given a hydraulic test before painting and loading. Inspectors walk the full length of the pipe looking for defects or signs of overstress during the hydraulic test.

TEXAS MAXIMUM SET AT 750,000 BARRELS

(Continued from Page 37)

be produced, and prorating the amount among the various fields of this State, is necessary."

Prorating by Fields

The maximums fixed in the various fields are as follows:

Panhandle, including Gray, Hutchinson, Moore, Carson, Potter and Wheeler Counties, 80,000 bbls.

North Central Texas, including Archer, Baylor, Clay, Cooke, Foard, Montague, Wichita and Wilbarger Counties, 69,000 bbls.

West Central Texas, including Brown, Callahan, Comanche, Coleman, Eastland, Jack, Palo Pinto, Erath, Shackelford, Stephens, Throckmorton, Young, Haskell and Runnels Counties, 52,000 bbls.

West Texas, including Crane, Upton, Crockett, Ector, Mitchell, Scurry, Howard, Glasscock, Jones, Reagan, Winkler, Pecos, Ward and Fisher Counties, 276,350 bbls.

(The amount allotted to this district is tentatively placed at 276,350 bbls. daily pending final determination of the exact amount to be allotted to same as a result of determination to be reached after hearing testimony and objection, if any, at a hearing herein scheduled to be held on the Twenty-fifth day of August, 1930.)

Southwest Texas, including Bexar, Caldwell, Atascosa, Guadalupe, Bastrop, Williamson, Milam, Live Oak, McMullen, Webb, Duval, Jim Hogg and Zapata Counties, 65,150 bbls.

(The amount allotted to this district is tentatively placed at 67,150 bbls. daily, pending final determination of the exact amount to be allotted to same as a result of determination to be reached after hearing testimony and objection, if any, at a hearing herein scheduled to be held on the Twenty-fifth day of August, 1930.)

Gulf Coast, including Orange, Jefferson, Hardin, Liberty, Chambers, Galveston, Harris, Washington, Austin, Fort Bend, Brazoria, Wharton, Matagorda, Refugio, Kleberg and Bee Counties, 150,000 bbls.

(This amount allotted to this district is tentatively placed at 150,600 bbls. daily, pending final determination of the exact amount to be allotted to same as a result of determination to be reached after hearing testimony and objection, if any, at a hearing scheduled to be held on the Twenty-fifth day of August, 1930.)

East Texas, including Anderson, Cherokee, Navarro, Freestone, Limestone and Van Zandt Counties, 41,850 bbls.

"The producers of oil in each field in each of the districts as above defined shall, at the hearing on the Twenty-fifth day of August, 1930, present to this commission in detail such evidence as may be proper for this commission then to determine the proper proportion of allowable production to be prorated to each field in each district, so as to limit the total production from each district to the amounts above specified; and such producers shall submit suggested forms of special orders for such fields designed to carry out the purposes of this general order, which special orders shall be considered by the commission at such hearing and adopted or modified as the commission may determine, or if none be submitted, then the commission will adopt special orders therefor. Special orders for particular fields heretofore adopted by the commission shall remain in effect except as they may be modified at or after such hearing.

"(3) Any producers of oil, or any group of such producers, in this State who feel aggrieved by this order or any subsequent order issued pursuant hereto shall have the right, upon application and notice, to a hearing before this commission upon such matter of grievance. Only such persons as may be directly affected by a ruling on the matter complained of shall be deemed parties at interest and entitled to notice. At such hearing this commission will enter such orders and such modifications of orders as it then may deem proper.

"(4) The producers of oil in each field in this district may select from their number a committee. The producers of oil in each district in this State may likewise select a committee of not less than three nor more than five. It shall be the duty of such committees, if selected, to aid and work in co-operation with the Railroad Commission, and its agents, in carrying out the details of the administration of this and subsequent order, and to suggest and work out any proposed modification of the same if it should develop that any unreasonable hardship or discrimination is being accomplished hereunder. Within the limits and in accordance with the terms of this order, and with the assistance of such committees and its agents, this commission will fix the amount of oil which may be produced from each property in this State during this proration period, or any extension thereof. It is hereby expressly provided that the final determination or disposition of all matters covered by this order is reserved to the commission.

"(5) On a day in the month of November, to be hereafter determined, notice of which will be given, there will be held in the hearing room of the Railroad Commission of Texas in the city of Austin, a hearing to determine whether or not this order shall be terminated at the expiration of the 90-day period, or whether it shall be modified and continued or continued in all of its then terms. This paragraph in this order shall be deemed due notice of such hearing to all parties concerned.

"(6) No provisions of this order shall be construed as relieving any person from a strict compliance with all existing laws and regulations of this commission governing the production, distribution, storage and purchase of oil."

The order is signed by Pat M. Neff, chairman; C. V. Terrell, and Lon A. Smith, commissioners.

Panhandle Plan

The plan considered by a committee of nine chosen by H. M. Stalcup, chairman of the Panhandle operators to study and report upon that district follows:

"1. The area to be prorated shall consist of all of Wheeler, Gray, Carson, Hutchinson and Moore Counties, Texas, and such other counties in the Panhandle section of Texas that might develop commercial oil production during the existence of this plan; from which area, however, shall be excluded all individual leases and, or individual oil producing properties whose daily average production of oil per well is or shall be 50 bbls. or less. By individual leases and/or individual oil producing properties is meant those leases and/or properties heretofore treated by their respective owner operators and others as individual units and those leases and/or properties that may be hereafter be acquired by their respective owner operators as individual units in accordance with common usage and custom in the industry.

"2. The daily amount of oil to be produced from each individual lease and/or property, as above described, shall be determined as follows: Each such lease and/or property shall be entitled to produce daily 50 bbls. of oil for each producing oil well thereon located and, in addition thereto, shall be entitled to produce daily only its prorata part of the proratable outlet in the proportion that its proratable daily potential production bears to the total proratable daily potential production of the area. By proratable outlet is meant that portion of the total outlet available for proration after allowing each lease and/or property its minimum allowance of 50 bbls. per well average as above provided for. By proratable daily potential production of lease and/or property is meant the actual potential production of such leases or properties in excess of the minimum allowance of 50 bbls. per well average above provided for. By total proratable potential production of the area is meant, the sum total of the proratable daily potentials of all the leases and, or properties in the area.

Potential Capacity

"3. The potential capacity of wells in the prorated area shall be determined by such physical tests, conducted at such times, for such periods and in such manner, as in the judgment of the umpire and advisory committee hereinafter provided for may be necessary to insure a just and effective proration, in accordance with the letter and spirit of this plan; your committee recommending that such tests be conducted at least once each 60 days for all wells in the area, and every 15 days for such wells as may be subject to substantial fluctuation in their production.

"4. The proration periods, under this plan, shall be from the first to the fifteenth of each month, and from the sixteenth to the end of each month; and at the end of each such period the advisory committee and umpire shall prepare the data and schedules upon which to base the proration for the next ensuing period.

"5. All wells (except those wells hereinafter specifically excepted from this provision), bona fide operations for the drilling of which shall be started after the date this plan is adopted, shall be restricted in their production to 50 bbls. per well per day for the then current proration period and for three months thereafter, and offset wells thereto shall be similarly and concurrently restricted in their production; provided that this provision shall not apply to wells drilling and/or producing wells or wells bona fide operations for the drilling of which have been started prior to the date this plan is adopted; and providing further that this provision shall not apply to wells that may be drilled as offsets to wells producing or in bona fide process of drilling prior to the date this plan is adopted; and providing further that this provision shall not apply to wells other than offset wells, the drilling of which wells is impelled by drainage from a similarly located well on a competitive lease or property; provided that just cause exists for the drilling of such well or wells in the judgment of the umpire and advisory committee, operators having the right of appeal to the Oil and Gas Division of the Railroad Commission of Texas from any such ruling of the umpire and advisory committee; but in such case the production from such well shall be limited to the same production as the similarly located well on such competitive lease or property for the then current proration period and for three months thereafter; provided, however, that such allowable production shall not exceed the amount said well would be entitled to produce regularly prorated under this plan. By offset well, as the term is used herein, is meant a well on an adjoining property or lease located approximately 330 feet from its property or lease line.

Umpire to Be Named

"6. This plan shall be administered by the Railroad Commission through an umpire appointed by the commission on nomination of an advisory committee composed of 11 members chosen by a committee consisting of one representative of each producer in said area whose production is proratable under this plan, and which advisory committee shall have the right and authority to provide for such personnel and such expenses as may be necessary to administer this plan, and such expenses shall be borne by the prorated production and distributed prorata among the producers affected. The advisory committee shall perfect its own organization and advise with and make such suggestions and recommendations to the umpire and the commission as they may see fit. Appeal may be had to the commission by the advisory committee or any producer in said area from any ruling or regulation of the umpire. Vacancies on the advisory committee shall be filled by a majority of its own members. If, because of withdrawals from the committee, or for any other reason, 6 or more members of the advisory committee are not in agreement on the nomination to fill such vacancy, same shall be filled by the committee consisting of one representative of each producer in the areas as provided herein for the selection of said committee originally.

"7. This plan shall continue in effect for a period of three months from and after its adoption, and for such other and further periods and/or lengths of time as may be provided for by the operators affected by the plan acting in co-operation with and under the sanction of the Railroad Commission.

"If such plan meets with the approval of and is adopted by the operators at the meeting to be held to consider said plan, said meeting shall proceed at once with the selection of an advisory committee as provided for in the plan and also take such steps as may be necessary to notify the Oil and Gas Division of the Railroad Commission of Texas of the fact that the foregoing plan was adopted and procure from said Oil and Gas Division of the Railroad Commission its approval and sanction of such plan."

The report was prepared and signed by J. H. Clark, chairman, W. O'Brien, A. G. Smith, William E. Hubbard, S. D. McIlroy, C. O. Shields and H. G. Schneider. G. A. Dye, who was also a member of this committee, was unable to attend committee meetings. J. M. Baldridge attended the committee meetings but was out of town and unable to sign the report.

This plan was adopted by almost a unanimous vote, but this seemed to be because the 50 bbls. or less wells were omitted from the production cut, when the new pipe line law states that all oil run must be proratable to each well. This objection was stated by Don Emery, counsel for the Phillips Petroleum Co., and was cited more in the way of a possible flaw which should be remedied, than as an objection.

Some sentiment was voiced for a 60-day proration period instead of a 90-day period as suggested and planned by the Railroad Commission and the general proration committee but this proposition was tabled.

PRESS B. LOWRANCE DEAD

Press B. Lowrance, president of the Southland Royalty Co., Ponca City, Okla., died on Monday in a hospital at Memphis, Tenn., where he had been receiving treatment.

Mr. Lowrance, a native of Tennessee and for years a levee building contractor along the Mississippi River, came to Oklahoma 11 years ago and became general manager of the Tom James Oil Co. which later was merged with the Marland Oil Co. He was elected mayor of Ponca City and was prominent in Republican politics. Mr. Lowrance had been ill several years from anaemia.

MICHIGAN FIELDS

(Continued from Page 64)

Corp.'s No. 2 P. J. Marthey and Gibson, Johnson & Borden's No. 2 Lucius Cole, both in Section 19, Denver Township, are drilling near the Dundee. The Stork Oil Co.'s No. 8 Stilgenbauer & Russell, in Section 12, Chippewa Township, is nearest the pay sands in the main field. In Sections 26 and 27 of Vernon Township, near No. 1 Bowman, the Mellon-Pollock Oil Co.'s No. 1 House & Crowley wells, respectively, are near completion. The Wittmer Oil & Gas Co.'s No. 1 Smith, in Section 30, Denver Township, is another well near the Dundee pay sands. This is one of about 16 tests drilling in the vicinity of Leaton, where oil interests in the Mt. Pleasant area are centered at the present time.

George Talbot's No. 1 Carmichael, in Section 22, Vernon Township, is another well nearing possible production this week in the Dundee formation.

Only one of six new permits issued last week by the State Conservation Department is for a well located in the immediate Mt. Pleasant area. It is Fred M. Stilgenbauer, trustee's No. 1 Skerret, NE NE SE, Section 5-14n-w, Broomfield Township, Isabella County. The Pure Oil Co. has started drilling its No. 1 Willie, SE SE SE, Section 4-14n-6w, also in Broomfield Township, in this vicinity.

A wildcat near Mt. Pleasant that has been shut down for some time but has renewed drilling operations is the St. Clair Oil & Gas Co.'s No. 1 Martz, SE SW, Section 1-14n-4w, Union Township, Isabella County.

A new wildcat location south of the field for which a permit was issued is the Wolverine Natural Gas Co.'s No. 1 Wolverine, on the Kerr farm, SE SW, Section 9-9n-1w, Elba Township, Gratiot County. Work has been started on the Smith Petroleum Co.'s No. 1 Miller Chase, NE NE, Section 21-9n-2e, Brady Township, Saginaw. It will be about the only activity in the vicinity of Saginaw at the present time.

Progress on two tests nearly 4,000 feet deep is being watched in Clare County, north of the Mt. Pleasant, as their success or failure may have much to do with developments there in the immediate future, where James A. McKay and James A. Mercier, Detroit capitalists, have drilled three dry holes but propose to test their extensive acreage further if there is any chance of success. The two wells in question are the Mammoth Oil Co.'s No. 1 Bothwell heirs, SW SE, Section 15-18n-4w, Hatton Township, Clare County, and the Peninsular Oil Co.'s No. 1 William Bowler, SW NW, Section 15-17n-4w, Grant Township.

Muskegon Field

Two new producers added to the total in the Muskegon oil field last week were the Central Gas & Oil Co.'s No. 4 John Joldersma, NW NE SW, Section 8-10-16, Muskegon Township, and the Reed Oil Co.'s No. 1 J. J. McDermott, SW SW, Section 10-10n-16w, both on the Muskegon River flats.

The Central-Joldersma well made 40 bbls. initial daily production in the Dundee pay sands struck at 1,999-2,014 feet, while the Reed-McDermott, formerly the Section Ten Oil Co.'s well, is good for about 12 bbls. a day on the pump in the lower Traverse formation at a total depth of 1,895 feet. Gas was struck at 1,865 feet followed by oil to 1,885 feet.

The Cimusk Oil Co.'s No. 1 Paulson-Barlow-Heinz, SE NE Section 8-10n-16w, Muskegon Township, recently completed for 70 bbls. initial daily flow in the lower Traverse pay sands is being deepened to the Dundee and has been cased at 1,978 feet ready to drill in this week.

Three other tests are drilling in the proven Muskegon Field, including one on a new location for which a permit was issued this week. It is the Mid-West Oil Co.'s No. 2 Mrs. Moch heirs, SE NE Section 7-10n-16w, Muskegon Township, north of the county tuberculosis sanitarium.

One other uncompleted well in the field is shut down between the lower Traverse and Dundee pay sands.

Muskegon County Wildcats

Four Muskegon County wildcats or semiwildcats are now drilling at varying depths above possible production in the Traverse or Dundee formations. Deepest of the four is the Jersey Oil Co.'s No. 1 Muskegon Brewing Co., NE SE NE Section 17-10n-17w, Laketon Township, near the state park. It is more than 1,000 feet deep after striking the red rock at 878 feet and having a trace of oil at the shallow depth of 365 feet last week.

The other three tests, all of which are drilling above the red rock, first accurate indicator of structure in the Muskegon area, are the Reed Oil Co.'s No. 1 H. Mann, NE NE Section 29-11n-17w, Fruitland Township; the White River Oil Corp.'s No. 5 William Lipka, NE SE Section 19-12n-17w, Montague Township; and the Valek Oil Co.'s No. 1 Valek, NE SW NE Section 3-10n-16w, Muskegon Township, east of the proven field.

Other Wildcat Operations

Three western Michigan wildcat wells and one drilled in south central Michigan by a Muskegon operating company are to be plugged and abandoned as dry holes. The Atlantic Exploration Co.'s No. 1 Brydges, NW SW Section 12-11n-13w, Ashland Township, Newaygo County, one of the deepest tests in the State, is to be plugged at 5,305 feet deep. Located several miles north of the village of Grant, it was drilled to a maximum depth of 5,463 feet before being plugged back and shot at 5,305 feet for a show of gas in the Niagara which was estimated to be good for a daily flow of about 60,000 cubic feet when first encountered. The Atlantic company recently started a second test on the Bailey farm, SE NW Section 9-11n-13w, also Ashland Township.

The Red Rock Oil Co.'s No. 1 Skidmore, SW NE Section 19-15n-18w, Golden Township, near Silver Lake, is shut down at 870 feet and probably will be abandoned. It was the only active wildcat in Oceana County.

Smith & Macauley's No. 1 Piellusch, NE SE Section 20-21n-16w, Stronach Township, Manistee County, also is being plugged as a dry hole at a total depth of 2,041 feet. It was dry in the Dundee and Monroe formations.

The Swastika Oil & Gas Co. of Muskegon has resumed operations on its No. 1 W. H. Croamer, NW NW Section 34-22n-16w, Manistee Township, Manistee County, near the city of Manistee. Drive pipe was landed at about 600 feet in this well last fall and operations were suspended for about six months.

A new western Michigan wildcat which is expected to prove of considerable interest is the Shamrock Oil Syndicate's No. 1 Youmans, SW SE Section 1-17n-15w, Logan Township, Mason County, because of its proximity to the three oil and gas wells brought in nearly two years ago in Logan Township by the Logan Oil Co. and its successor, Taggart & Welsh.

These tests, about 50 miles north of the Muskegon Field, aroused no little interest because a flow of 300,000 and 750,000 cubic feet of gas, respectively, was struck in the Niagara formation in two of them and the third was about a 90-bbl. oil well in the Traverse formation. Gas was struck at about 3,300 feet and oil at 1,900 feet.

The Crude Oil Co.'s No. 1 J. Tooley, SE SE NE Section 28-3s-4e, Howell Township, Livingston County, will be plugged at 951 feet.

A new location also was made in southeastern Michigan by Alfred Violette of Willis, Mich. It is No. 1 Atchinson, SE SE Section 30-3s-7e, Ypsilanti Township, Washtenaw County.

O. L. Barneby's No. 1 John Galloway, NW NE Section 11-6n-3e, Shiawassee Township, Shiawassee County, which was brought in several months ago as a small producer in the upper Traverse pay sands, but later went to water, is being deepened to the Dundee. It is located in the east central portion of the State near Owosso and Corunna.

Muskegon Declines

Daily production of the Muskegon oil field is gradually declining, the few new completions being small. Total production is now about 3,000 bbls. of oil and 3,500,000 feet of gas. Four oil pipe lines have daily crude runs about as follows: Old Dutch Refining Co., 1,600 bbls.; Dixie Pipe Line Co., 800 bbls.; Independent Pipe Line Co., 400 bbls., and Northland Oil Transit Co., 200 bbls. Of the total gas output about 700,000 feet is being distributed to domestic and commercial customers of the Muskegon Gas Co., while the rest is going to industries through the West Michigan Consumers Co., the Muskegon Pipe Line Co. and the Continental Motors Corp. lines.

With the exception of daily runs of the Dixie Pipe Line Co., the oil is going to two local operating refineries. The Old Dutch Refining Co. is getting between 1,500 and 2,000 bbls. a day from three independent oil lines, two owned and operated by the company. Oil gathered by the Independent Pipe Line Co. is being refined by the H. H. Cross Co. in its small plant on M-20.

Dixie production is being stored in the 80,000-bbl. tank of the Standard Oil Co. of Indiana for boat shipment to Standard refineries at Whiting, Ind. The last cargo of about 32,000 bbls. of oil was shipped during the first week in July and about three more boat loads are expected to be transported to Indiana Harbor by barge before the close of the navigation season in December.

OKLAHOMA FIELDS

(Continued from Page 51)

Field, is estimated to be good for 6,000,000 feet of gas from the chat at 4,390-4,430 feet. Blankinship Petroleum Co. and others' No. 1 Randol, SW cor. NW SW, Section 17-27-2, is making about 35 bbls. of oil and an estimated 5,000,000 feet of gas from the Bartlesville sand at 3,588-98 feet.

Another sand producer was found in the western part of Kay County. J. E. Hosack and others deepened No. 2 Barrett, SW cor. NE NW, Section 7-28-1, to the Bartlesville sand at 3,540-70 feet, where it is estimated to be a 40-bbl. well on the pump. It is the third well in the county to find production in the Bartlesville sand.

Greater Seminole Area

Amerada Petroleum Corp. and Dixie Oil Co.'s No. 1 Chase, NW cor. NE SW Section 29-9-6, a wildcat test, has landed the 8-inch casing at 4,025 feet. The well is believed to be running high on structure and some express the opinion it may open another "pimple" pool in the Seminole area. The well is located about a mile and a half southwest of the East Earlsboro Pool, and is practically surrounded by dry holes.

The Pure Oil Co.'s No. 1 Ashby, SE cor. NE Section 22-7-5, a wildcat east of the St. Louis Pool, will be plugged back to the Simpson sand and tested for production. The well has water in the second Wilcox sand at a total depth of 4,312 feet. The 5-inch casing is being pulled.

Harper County's Gasser

Sinclair Oil & Gas Co.'s No. 1 Howell, C SW SW Section 14-26-24w, Harper County wildcat, is fishing for casing. The well is making from 7,000,000 to 10,000,000 feet of gas from an unidentified horizon, and spraying some gasoline. The well was drilled with rotary tools to a total depth of 8,583 feet before being plugged back.

Sinclair Oil & Gas Co.'s No. 1 Stewart, NW cor. SW SW Section 33-27-16w, Woods County wildcat, which had Wilcox sand at 7,146-76 feet and when cored found a showing of oil cemented the 4¾-inch casing. The cement plug was drilled out and after bailing the hole down 1,000 feet the bailer was sent to the bottom of the hole where only a showing of water was found. It is the first test in the northwestern part of the State to find the Wilcox sand.

Southern Oklahoma

New wells added to the Cement Pool's deep sand production and other tests are waiting for cement. The two new producers were Magnolia Petroleum Co.'s No. 9 Lindsey, NW cor. SE Section 36-6-10w, Caddo County, swabbing 96 bbls. the first 14 hours. The tubing is being landed preparatory to pumping. Production is coming from a series of sands at 3,141-3,342 feet. The Magnolia Petroleum Co. was bailing with 900 feet of oil in the hole in No. 8 Caddo-Rowe, SE cor. SW NE Section 36-6-10w. The oil was found in a series of sands at 3,163-3,328 feet. Same operators' No. 8 Lindsey, NE cor. NW SE Section 36-6-10w, is shut down waiting for cement to set. The casing is cemented at 3,127 feet and the total depth is 3,366 feet. Rome and others' No. 1 Rigney, SE cor. NW Section 12-5-9w, has casing cemented at 3,143 feet with a showing of oil at 3,163-79 feet. Two new producers were added to the Tatums district in Carter County during the week. J. H. Hudson's No. 1 Brooks, SE cor. SW SW Section 13-1s-3w, on the north edge of the field, is swabbing at the rate of 400 bbls. a day. The casing was cemented at 2,266 feet. Magnolia Petroleum Co.'s No. 1 Brady, SW cor. SE SW Section 13-1s-3w, swabbed 65 bbls. of oil in 20 hours. Production was found in a series of sands at 2,260-2,525 feet.

Oklahoma City's Shut-In Production

The initial production of the shut-in wells in the Oklahoma City Pool that have been allowed to produce for 24 hours or less as of August 9, and are now shut in for the proration period, was 802,350 bbls. This initial production and the approximate dates each well will be opened for its regular producing period follows:

I. T. I. O.:			
Sudik	•1	[13]0,000	....
M. Fuzzell	3	6,301	8-21-30
G. Button	5	[19]000	8-21-30
Trosper Park	•6	[15]060	8-21-30
E. Trosper	•1	[116]271	8-20-30
Jones	•10	42,604	8-19-30
L. Farley	4	7,395	8-18-30
Mary Sudik	•4	16,199	8-27-30
Canfield Button	2	[6]494	8-26-30
School Land	•2	[164]482	8-27-30
School Land	•1	[84]734	8-27-30
School Land	•3	[107]734	9- 2-30
S. Peterson	•2	[76]327	9- 2-30
A. Brokaw	•3	2,855	9- 1-30
C. Trosper	•2	[82]385	9- 1-30
Johnson	•5	2,406	8-31-30
Farley	•1	6,408	8-30-30
Mary Sudik	•7	[5]169	9- 3-30
Rensimer	•1	[21]930	9-14-30
M. Sudik	•8	[178]916	9-14-30
H. G. Trosper	•1	[17]595	9-14-30
S. Peterson	•2	[197]591	9-12-30
E. Trosper	•2	[12]185	9-12-30
Theimer	•5	[2]562	9-12-30
Spillman	•1	10,227	9-26-30
Holmes Gray	•1	[24]173	9-26-30
N. Emerson	6	[2]113	9-25-30
Carrico	•1	[17]517	9-27-30
N. Emerson	11	[2]699	9-27-30
Jones	•13	36,186	9-28-30
W. J. Phillip	•1	[27]586	9-29-30
Jones	•14	[2]562	9-31-30
Corff	•1	•917	10- 3-30
Habegger	•1	[3]296	10- 4-30
Peterson	•5	[33]755	10- 5-30
Phillips	•1	[47]586	10- 5-30
Carrio	•1	9,744	10- 4-30
Coppenger	•1	10,010	10- 5-30
Watters	•5	[11]544	10- 5-30
M.-K.-T.	•1	[03]264	10- 6-30
H. G. Trosper	•3	7,002	10- 6-30
Boulevard	•1	•891	10-13-30
Huffman	•1	3,015	10-12-30
Watters	•6	3,362	10-10-30
Lemon	•2	4,502	10- 9-30
Watters	•4	2,703	10- 9-30
H. G. Trosper	•3	14.720	10- 9-30
R. Hemmer	•1	[1]340	10-20-30
Ferndale Commun.	•4	[5]966	10-20-30
Pasadena Heights	•2	42,626	10-19-30
State Land	•5	[3]524	10-18-30
S. Peterson	•6	[10]356	10-17-30
W. Franklin:			
Lowery	•8	[10]000	8-20-30
Wright	•1	5,805	8-27-30
Theimer	•8	[20]000	9-29-30
Holder	•1	[3]000	10- 6-30
Page	•1	7,209	10- 2-30
Theimer	•7	[15]077	10-16-30
Cromwell:			
Trosper Park	•6	11,921	8-30-30
Trosper Park	•20	[8]726	9-22-30
Trosper Park	•23	14,623	9-22-30
Trosper Park	•24	[03]008	9-22-30
Trosper Park	•25	[9]960	10-20-30
Trosper Park	•27	[4]187	10-19-30
Sinclair:			
School Land 54	•3	4,420	8-13-30
School Land	•4	9,050	8-14-30
Farley Fuzzell	2	10,865	9- 4-30
Vincl	•5	[15]730	8-14-30
Vincl	•8	[3]720	8-14-30
School Land 67	•2	6,770	8-14-30
School Land 54	7	[8]000	8-30-30
Vincl	•11	31,290	8-30-30
School Land 54	•13	7,150	8-20-30
School Land 54	•10	17,220	8-30-30
School Land 67	•3	15,940	8-29-30
School Land 54	•16	[28]145	9- 1-30
Vincl	•9	[7]075	9- 2-30
School Land 54	•6	[12]000	9-14-30
Vincl	•14	[22]225	9-13-30
Vincl	•16	[7]905	9-13-30
Donnell	•1	3,050	9-13-30
School Land 69	•.	[12]570	9- 2-30
School Land 54	•16	15,545	9- 4-30
Vincl	•6	[210]500	10- 1-30
Vincl	•15	[2]175	10-19-30
Vincl	•10	[2]340	10-18-30
Coline:			
Clauer	6	5,596	8-28-30
Olds	•7	[21]763	8-28-30
Clauer	•10	4,496	9- 1-30
Clauer	•9	11,948	9-24-30
Warren	7	8,826	9-25-30
Clauer	•13	[2]545	10-10-30

Clauer	*12	1,401	10-18-30
Clauer	*7	[19]968	10-17-30
Slick:			
Classen	*1	[21]1,711	8-29-30
Foote	*1	[10]10,000	8-27-30
G. Milner	*1	[6]9,924	9-14-30
Storie	*1	8,636	9- 3-30
Crawford	*1	13,883	9-28-30
Baker	*4	19,328	9-21-30
Baker	*1	[3]1,428	10- 5-30
Milner	2	12,886	10- 2-30
Page	*1	[13]3,433	10-13-30
Baker	*2	[10]10,250	10-11-30
Page	*2	[5]1,090	10-20-30
Frost Heights	*1	[16]3,937	10-18-30
Alexander	*1	[34]330	10-19-30
Mid-Texas:			
Hiddleston	*1	2,320	10- 2-30
Prairie:			
Hiddleston	9	[19]4,310	8-20-30
Jack Shaffer et al:			
Jones Community	1	2,345	8-21-30
Hall & Briscoe:			
Lindsay	2	[7]944	9- 1-30
Holmes	*3	[35]7,201	10-20-30
Wrightsmith Oil Co.:			
Smith	*1	[5]5,312	9- 2-30
Phillips Pet. Co.:			
Traders Comprio	*1	4,055	9-25-30
Prairie:			
Bigmon	*4	7,530	10- 8-30
Shell:			
Egermeyer	*1	[2]2,043	10-10-30
Plains & Denver:			
Boulevard	*1	4,968	10-13-30
Century Pet. Co.:			
Wyatt	1	[3]3,000	10-14-30
Independent:			
Hatcher	*1	5,339	10-18-30
Julian:			
Community	*1	4,364	10-18-30
Community	*2	[3]3,600	10-20-30
Total	116	802,350	

*Wells producing from the Simpson sand. All others are producing from the Arbuckle lime.

[1]Estimated. [2]Thirteen hours. [3]Fourteen hours. [4]Twelve hours. [5]Five hours. [6]Eighteen hours. [7]Sixteen, one-half hours. [8]Seventeen hours. [9]Nineteen hours. 45 minutes. [11]Sixteen hours. [12]One hour, 15 minutes. [14]Twelve minutes. [15]Eleven and one-half hours. [17]Fifteen hours. [18]Twenty-one and one-half hours. [20]Nineteen hours. [22]Fifteen and three-quarter hours. [23]Eighteen and one-half hours. [24]Six hours. [26]Fifteen hours, 40 minutes. [28]Ten and one-quarter hours. [29]Four hours. [31]Eight hours. [33]Eleven hours, 10 minutes. [37]Seventeen hours, 30 minutes. [39]Fourteen and one-half hours. [40]Ten hours, 15 minutes. [41]Twenty-one hours. [42]Two and one-third hours. [43]Thirty minutes. [44]Two hours. [45]Nine hours.

These notations indicate the number of hours and wells produced on their initial production test.

Greater Seminole Production

An increase of 32,000 bbls. a day in production is noted in the Greater Seminole area for the week ending August 11. These gauges include the new potentials for the month of August. The Seminole area averaged 154,762 bbls. from 1,897 wells. The daily gauges from the different pools in the Greater Seminole area was as follows:

Pool—	Wells	Bbls.
Little River	375	27,333
East Little River	84	14,436
Carr City	60	6,955
Maud	139	4,198
Mission	100	8,003
Bowlegs	280	15,184
Earlsboro	293	23,789
South Earlsboro	27	11,334
East Earlsboro	155	17,311
Seminole	266	15,874
East Seminole	33	2,456
Searight	85	7,889
Allen	269	14,615
Asher	26	1,291
West Asher	20	4,437
Konawa	94	23,012
St. Louis	487	26,383
Sasakwa	53	5,384
Total	2,846	229,884

Seminole Oil Shipments

Pipe line companies increased shipments from the Greater Seminole area for the week ending August 11. The total shipments from the area were 209,085 bbls. The daily average shipments by companies and tank car deliveries were as follows:

Company—	Seminole	Asher Pearson St. Louis	Konawa
Barnsdall	3,311	.....	.....
Champlin	5,424	.....	369
Continental	312	.....	.....
Consolidated	.....	1,729	.....
Cosden	4,316	.....	4,172
Deep Rock	3,345	585	.....
Empire	4,399	.....	.....
Gulf	23,996	2,847	697
Independent	.....	2,805	.....
Magnolia	8,351	6,933	.....
Oklahoma	22,044	4,881	475
Prairie	12,642	3,654	4,730
Prod. & Refiners	1,656	.....	.....
Pure	4,307	.....	.....
Shell	7,329	340	2,220
Sinclair	26,144	7,726	3,431
Texas	9,212	2,078	3,323
Tidal	9,162	3,830	.....
White Oak	1,500	.....	.....
Total	148,148	37,408	19,417
Tank cars	4,112		
Grand total	152,260		

Oklahoma City Oil Shipments

The total shipments from the Oklahoma City Pool for the week ending August 14 were 545,300 bbls. The shipments by companies and the daily average were as follows:

Company—	Total	Daily Aver.
Empire	132,191	18,884
I. T. I. O.	43,254	6,179
Magnolia	64,115	9,159
Oklahoma	119,934	17,133
Prairie	93,024	13,289
Sinclair	69,284	9,898
Shell	1,820	260
Tidal	21,678	3,097
Total	545,300	77,899

Actual Production

The daily gauges from the Oklahoma City Pool, for the seven days ending August 18, showing the date, number of barrels produced each day, number of wells on production, and total number of wells completed each day, were as follows:

Date—	Bbls.	Wells Prod.	Wells Comp.
August 12	42,731	28	411
August 13	90,275	48	416
August 14	59,258	37	418
August 15	102,984	43	420
August 16	139,462	56	423
August 17	67,556	36	425
August 18	120,499	40	426

Hughes County

Iglehart and Skelly's No. 1 Smith, C SE SE, Section 28-9-10, is a cellar. McGee and others' No. 1 Buck, SE cor. SE, Section 21-9-10, is dry and abandoned in sand at 3,170 feet. Clark-Cowden's No. 1 Brown, SW cor. SE NE, Section 17-7-8, has been completed for 40,000,000 feet of gas in sand 2,924-71 feet. Dubbs-Pryor's No. 1 Allen, SW cor. NW, Section 16-6-10, is dry and abandoned in sand 600-763 feet.

Osage County

Oliphant and others' No. 2, SW cor. SE NE, Section 10-21-8, is a machine. Pueblo Petroleum Co.'s No. 2, NE cor. NW NW, Section 14-21-8, is a rig. National Refining Co.'s No. 11, NE cor. SW SE, Section 22-27-11, has been completed for 60 bbls. in sand 1,685-1,702 feet. Vacuum Oil Co.'s No. 4, NW cor. SE NE, Section 22-26-6, made 165 bbls. in broken sand 2,998-3,009, total depth 3,016 feet. Prairie Oil & Gas Co.'s No. 8 Buffalo, SW cor. NE SW, Section 30-25-8, has been completed for 200 bbls. in sand 2,388-2,431 feet. The Texas Company and the Prairie Oil & Gas Co.'s No. 6, NW cor. NE NW, Section 30-25-8, has been completed for 60 bbls. in chat 2,415-52 feet. No. 7, NE cor. NW NW, Section 30-25-8, is dry and abandoned in chat 2,518 feet. The Galt-Brown Co.'s No. 5, NE cor. NE, Section 15-24-8, is dry and abandoned at 2,725 feet. Mid-Co Oil Co.'s No. 20, NW cor. NE SE, Section 18-22-10, has been completed for 5 bbls. in Burgess sand 1,945-70 feet, total depth 2,283 feet. Oklahoma Natural Gas Corp.'s No. 1,799, NW cor. SW SE, Section 30-21-11, has been completed for 67,000 feet of gas in Tucker sand 2,068-80 feet, total depth 2,201 feet. The Prairie Oil & Gas Co.'s No. 6, NE cor. NW NW, Section 31-25-8, is a location.

Pawnee County

Sherry and others' No. 1 Millsap, SE cor. SW, Section 2-22-5, is a rig. Flynn, Morgan and others' No. 1 Freeman, NW cor. NW, Section 1-20-5, is a rig on ground. Thompson & Black's No. 3-A Mote, NW cor. NE NW SW, Section 14-20-9, is drilling at 375 feet. Geraldng Oil Co.'s No. 1 Elledge, SE cor. SW, Section 7-20-9, has been completed for 5 bbls. in Layton sand 1,225-42 feet, total depth 1,415 feet. Thompson & Black's No. 3 Mote, NE cor. NW SW, Section 14-20-9, has been completed for 275,000,000 feet of gas in Layton sand 900-23 feet.

Pottawatomie County

Droppleman & Burke's No. 1 Fundis, SE cor. NE, Section 19-7-3, is a location. Mid-Continent Oil & Gas Co.'s No. 1 Archer, SW cor. SE, Section 14-6-3, is a location. Deep Rock Oil Corp.'s No. 1 Gibson, NW cor. SE, Section 23-6-3, is a location. Wilcox Oil & Gas Co. has rig on ground for No. 5 Warren, SW cor. NE SW, Section 23-6-3. The Prairie Oil & Gas Co.'s No. 4 Tomlin, NE cor. NW NW, Section 23-6-3, has been completed for 2,150 bbls. in sand 3,558-70 feet. Clark & Cowden's No. 1 Townsite, NE cor. SW NW, Section 8-9-5, made 250 bbls. in Wilcox sand 4,417-43 feet. Shell Petroleum Corp.'s No. 1 Case, SW cor. SW, Section 14-6-3, is dry and abandoned at 3,569 feet. No. 2 Case, SE cor. SW SW, Section 14-6-3, is dry and abandoned in sand 3,618-29 feet. Pure Oil Co.'s No. 1 Case, SW cor. SE SW, Section 14-6-3, has been completed for 1,130 bbls. in sand 3,618-35 feet. Gypsy Oil Co.'s No. 1 Navarrie, SE cor. SE, Section 15-6-3, is dry and abandoned at 3,637 feet. Independent Oil & Gas Co.'s No. 1 Jameson, SE cor. SW SE, Section 15-6-3, is dry and abandoned at 3,699 feet. Gypsy Oil Co.'s No. 1 Archer, NW cor. SW SW, Section 23-6-3, has been completed for 144 bbls. in sand 3,513-95 feet, plugged back to 3,525 feet. Indian Territory Illuminating Oil Co.'s No. 4 Davidson, NE cor. SW NW, Section 23-6-3, has been completed for 2,762 bbls. in sand 3,459-76 feet. Westheimer & Neustadt's No. 1 Johnson, NE cor. SE SW, Section 27-6-3, made 130 bbls. in sand 3,601-21 feet after plugging back from 3,658 feet.

Seminole County

Bunte and others' No. 1 Bruner, SE cor. SE NW, Section 19-10-6, is a location. The Texas Company's No. 5 Mayhue, NW cor. NE, Section 14-9-6, is a rig. Hilton Phillips and others' No. 1 Whisenhunt, SW cor. NE SE, Section 35-7-5, is a rig on ground. Amerada Petroleum Corp.'s No. 4 Grounds, NW cor. SW NW, Section 23-9-5, is dry and abandoned at 4,308 feet. Amerada Petroleum Corp. and others' No. 6 Grounds, NE cor. SW NW, Section 23-9-5, is dry and abandoned at 4,238 feet. Gypsy Oil Co.'s No. 2 Miller, SE cor. SW SE, Section 24-9-5, made 562 bbls. in sand 4,234-39 feet. Amerada Petroleum Corp. and Wilcox Oil & Gas Co.'s No. 2 Gates, NW cor. NE NE, Section 25-9-5, is dry and abandoned in sand 4,218 feet. Mid-Continent Oil & Gas Co.'s No. 2 Harjoche, SE cor. SW, Section 17-6-6, has been completed for 180 bbls. in sand 2,938-45 feet. Barnsdall Oil Co.'s No. 5 Johnson, SW cor. SE, Section 17-6-6, has been completed for 310 bbls. in sand 2,888-97 feet, total depth 2,926 feet. Empire Oil & Refining Co.'s No. 2 Dameron, SE cor. NW, Section 20-6-6, has been completed for 805 bbls. in sand 2,873-2,925 feet. Hilton-Phillips' No. 6 Hyde, SW cor. NE, Section 20-6-6, has been completed for 910 bbls. in sands 2,877-85 and 2,910-25 feet. The Prairie Oil & Gas Co.'s No. 2 Hyde, SE cor. SW NW, Section 2-8-5, is a cellar. No. 4 Davis, NW cor. SW NE, Section 13-7-6, is a cellar. No. 5 Reed, NE cor. SE NW, Section 13-7-6, is a cellar. Sinclair Oil & Gas Co.'s No. 3-A Cully, SE cor. NW NW, Section 13-5n-7e, is a rig on ground. The Prairie Oil & Gas Co.'s No. 1 Whittack, SE cor. SE SW, Section 36-7-7, has been abandoned in sand at 4,045 feet. Sinclair Oil & Gas Co.'s No. 2-A Cully, SW cor. NE NW, Section 13-5-7, has been completed in sand 4,274-84 feet for 1,506 bbls. W. B. Pine and others' No. 2 Davis, CSL N half NW, Section 17-5-8, has been completed for 50 bbls. in sand 2,507-91 feet.

Carter County

Wirt Franklin Petroleum Corp.'s No. 2 E. R. Spigner, NW cor., Section 24-1s-3w, is rigging up. Trevelyn Oil Co.'s No. 3 W. Mitchell, NE cor. SW SE, Section 24-1s-3w, is rigging up rotary. C. Anderson has the rig up for No. 4 Eaves, NE cor. SW, Section 24-1s-3w. Walter Gant and others made location for No. 1 Meeks, SW cor., Section 19-1s-2w. Magnolia Petroleum Co.'s No. 7 E. Gill, NE cor. SE, Section 23-1s-3w, made 283 bbls. in sand 2,516-24 feet. Wirt Franklin Petroleum Corp.'s No. 1 W. Mitchell, NW cor. SE, Section 24-1s-3w, has been completed for 1,800 bbls. in sand 2,420-61 feet. Trevelyn Oil Co.'s No. 2 W. Mitchell, NW cor. SW SE, Section 24-1s-3w, has been completed for 1,775 bbls. in sands 2,274-96 feet and 2,335-2,435 feet. C. Anderson's No. 2 Eaves, NW cor. SW. Section 24-1s-3w. has been completed for 50 bbls. in sand 2,375-2,454 feet, total depth 2,639 feet.

Creek County

Johnson Oil Refining Co.'s No. 1 Henneha, SW cor. SE, Section 11-19-9, is spudding. Beal & Plumb and others' No. 1 Peen, SW cor. SE SW, Section 23-18-9, is rigging up. S. J. Mathews and others made location for No. 1 Vierson, CSL SE SE, Section 16-16-11. C. G. Tibbins Oil & Gas Co.'s No. 1 Long, SW cor. NE, Section 6-14-9, is drilling at 500 feet. Gled Oil Co.'s No. 1 Field, NW cor. SW, Section 31-19-8, has been abandoned at 3,035 feet. Phillips Petroleum Co. and Gled Oil Co.'s No. 8 Koch, SE cor. NE, Section 20-19-9, has been completed for 130 bbls. in sand 2,163-2,221 feet. Dixie Drilling Co.'s No. 1 Helton, CNL NE NE, Section 12-17-9, made 20 bbls. in sand 1,783-1,810 feet. Carpenter and others' No. 1-A Collins, SE cor. NE NW, Section 4-17-11, is dry and abandoned at 2,120 feet. Pioneer Oil Co.'s No. 3 Lewis, SW cor. NW, Section 19-17-11, is dry and abandoned at 2,470 feet. Amerada Petroleum Corp. and Dixie Oil Co. and others' No. 1 Whitenbeck, NE cor. SW, Section 21-16-8, is dry and abandoned at 3,835 feet. C. G. Tibbins Oil & Gas Co.'s No. 1 White, SE cor. NW, Section 6-14-9, has been completed for 2,000,000 feet of gas in sand 1,001-13 feet. Atlantic Oil Producing Co.'s No. 1 Harjo, SW cor. NE, Section 27-14-10, made a 30-bbl. well in Wilcox sand 3,329-36 feet.

Caddo County

Magnolia Petroleum Co.'s No. 9 Niles, NE cor. NW, Section 36-6-10w, is a rig.

Haskell County

Indian Territory Illuminating Oil Co. is erecting the rig for No. 1 Blake, SW cor. NW, Section 3-10-21.

Lincoln County

T. J. Hughes and others' No. 1 School Land, NW cor. NE, Section 36-17-3, has been completed for 11,000,000 feet of gas in sand 3,904-47 feet.

Marshall County

E. L. Hartley and others' No. 1 Cliff Illitt, NW cor. SE, Section 26-5s-5, is drilling at 200 feet. Bilbo Oil Corp.'s No. 15 Taliferro, SW cor. NE SE, Section 14-5s-5, is dry and abandoned at 741 feet. No. 6 Davis-Sullivan, CWL E half W half NW, Section 30-5s-6, has been abandoned at 735 feet. Otto Reynolds' No. 3 Davis-Sullivan, SW cor. NW SE NW, Section 30-5s-6, is making 50 bbls. from sand 645-50 feet.

McIntosh County

A. Moffitt and others' No. 1 J. Taylor, NW cor. NE SW, Section 29-12-15, is drilling at 700 feet.

Muskogee County

Foltz & Paul's No. 1 M. Escoe, SE cor. SW NW NE, Section 8-15-18, is dry and abandoned at 1,700 feet. A. H. Hanson's No. 1 E. Crabtree, CEL SW NW, Section 12-15-18, is a dry hole at 1,037 feet. The Prairie Oil & Gas Co.'s No. 1 Finkles, SE cor. SE, Section 4-11-19, is a location.

Oklahoma County

Phillips Petroleum Co. is erecting the rig for No. 1 J. R. Ball, NW cor. NE SW SE, Section 3-11-3w, Oklahoma City Pool. Wirt Franklin Petroleum Corp.'s No. 1 Page, SE cor., Section 35-12-3w, has been completed for 7,209 bbls. at 6,390 feet after plugging back from 6,450 feet in Arbuckle lime. Indian Territory Illuminating Oil Co.'s No. 6 Emmerson, SW cor. SE SW, Section 30-11-2w, made 1,179 bbls. from sand 6,320-6,590 feet. Thomas B. Slick and Atkinson's No. 2 Baker, NW cor. SW SE NW, Section 1-11-3w, flowed 12,192 bbls. from sand 6,270-6,444 feet. Indian Territory Illuminating Oil Co.'s No. 2 Lemmon, SE cor. SW SE, Section 11-11-3w, produced 4,502 bbls. from sand 6,440-6,520 feet. No. 1 Huffman, NE cor. NW SW, Section 14-11-3w, has been completed for 3,015 bbls. in sand 6,320-6,599 feet. Indian Territory Illuminating Oil Co. and Anderson & Prichard's No. 1 Boulevard Addition, SW cor. NW NW, Section 14-11-3w, flowed 1,452 bbls. from Detrital formation 6,315-6,650 feet. Plains Petroleum Co. and Denver Producing & Refining Co.'s No. 1 Boulevard View-Whitten Addition, SW cor. NW NW. Section 14-11-3w, has been completed for 4,527 bbls. in sand 6,346-48 feet. Thomas B. Slick's No. 1 Page, NE cor. NW, Section 14-11-3w, made 3,741 bbls. from sand 6,285-6,559 feet. Shell Petroleum Corp.'s No. 1 Egermier, NE cor. SW, Section 23-11-3w, has been completed for 3,664 bbls. in sand 6,350-6,628 feet.

Coline Oil Co.'s No. 12 Clauer, SE cor. NE SE, Section 25-11-3w, made 1,407 bbls. from sand 6,255-6,487 feet, total depth 6,525 feet. Indian Territory Illuminating Oil Co.'s No. 4 Watters, SW cor. NW NE, Section 25-11-3w, has been completed for 2,270 bbls. in sand 6,285-6,473 feet. No. 5 Watters, SE cor. SW NE, Section 25-11-3w, made 1,748 bbls. from Arbuckle lime 6,500-11 feet. No. 6 Watters, NW cor. SW NE, Section 25-11-3w, has been completed for 3,362 bbls. in sand 6,420-6,541 feet. Sinclair Oil & Gas Co.'s No. 7 School Land No. 54, NE cor. SE NE, Section 36-11-3w, made 3,945 bbls. in 23 hours from sand 6,468-83 feet. The Prairie Oil & Gas Co.'s No. 4 Sigmon, SW cor. SW, Section 32-11-2w, has been completed for 7,520 bbls. in sands 6,485-6,558 feet, total depth 6,632 feet.

Okmulgee County

Laswell and others' No. 3 S. Johnson, SW cor. NW SE SE, Section 27-13-13, is drilling at 1,900 feet. Jordan and others moved a machine in for No. 1 M. Anderson, NE cor. NW NE, Section 28-12-14. No. 2 A. Gooden, SW cor. NE SE, Section 28-12-14, is also a machine. A. G. Hazlett's No. 3 Dunbar, SW cor., Section 30-14-13, has been completed for 10 bbls. in sand 1,938-58 feet. J. C. Smith and others' No. 1-A Rawley, SW cor. NW SE, Section 22-13-11, has been abandoned at 300 feet. Jess Rebold's No. 3 A. McGilbray, SE cor. NE, Section 27-13-13, has been completed for 8 bbls. in sand 1,359-73 feet.

Okfuskee County

F. A. Havel has the rig up for No. 2 Likowski, CNL NE NW, Section 26-11-11.

Payne County

Skelly Oil Co.'s No. 1-A School Land, NE cor. SE SW, Section 16-19-5, has been completed for 15 bbls. in sand at 3,825 feet after plugging back from 3,871 feet.

Tulsa County

Holmes & Burton and Johnson Refining Co.'s No. 2 Brightman, CSL NE NE, Section 30-19-10, has been completed for 125 bbls. in sand 2,205-35 feet.

Pontotoc County

Benedum-Trees Oil Co. has the rig up for No. 1 Wallen, NW cor. SE SE, Section 28-5-5, Bebee Pool.

Wagoner County

A. H. Secrest's No. 1 Barnett, SW cor. NE, Section 34-17-16, has been completed for 354,200 feet of gas in sand 882-88 feet.

Grady County

Meridian Gas Co. made location for No. 1 Brown, CSL NW NW, Section 31-4-7w.

Jefferson County

Bridewell Oil & Gas Co.'s No. 1 Seay, NE cor. SE NW NE, Section 10-7s-5w, has been completed for 29 bbls. in sand 1,079-97 feet. Sigler & McGinley's No. 2 Jones, SE cor. NE NW SW, Section 16-7s-5w, has been completed for 7 bbls. in sand 779-84 feet.

Stephens County

George Pace and others made location for No. 1 Ing, SW cor. NE, Section 20-1-8w. Magnolia Petroleum Co.'s No. 7 Farris, NW cor. SW NE, Section 23-2s-6w, has cemented surface pipe. No. 6 M. Green, NE cor. NW, Section 13-1s-4w, drilled to 4,267 feet, plugged back to 2,800 feet and was completed for 20,000,000 feet of gas. Pandem Oil Co.'s No. 1 Burkleo, NW cor. SW NW NW, Section 4-2s-8w, is pumping 25 bbls. from sand 2,189-93 feet.

Logan County

Blackwell Oil & Gas Co.'s No. 1 Quigley, NE cor. SE SW, Section 21-18-4w, is a cellar.

Noble County

Barnsdall Oil Co. and others' No. 1 Minch, NW cor. SW, Section 12-21-1, is a rig on the ground. Magnolia Petroleum Co.'s No. 1 Sumers, SE cor. NE NW, Section 4-20-1w, made 17,000,000 feet of gas at 3,411-28 feet.

BEARDSLEY KNOWS WHAT BROKE MEANS

(Continued from Page 41)

careful not to visit the same saloon twice within the memory of the watchful bartender. Even unto this day Mr. Beardsley, who is and always has been an ardent dry, personally as well as politically, owns to a feeling of gratitude for the way in which he was able to save himself from starvation.

Well, Well, a Job?

Weeks of this sketchy form of living passed before a providential vacancy in the teaching staff back in Erie County enabled Reed to see a pay envelope dangling teasingly before his eyes. By some mysterious financial engineering he transported himself thither, was rejoined by Mrs. Beardsley and once more was able to whistle and mean it when he arose in the morning.

With the end of the school term industrial conditions were still sick and no sign of a civil engineering job was visible, so Reed got another pipe line job such as he had had two years before. It meant an income and there might be opportunity to make some headway. This time he worked around Oil City under T. P. Welch, the superintendent of the pipe line division of the National Transit Co. Once while the gang was laid off for 10 days, waiting for pipe, our young college graduate tamped ties for a traction company.

It often happened that the pipe line gang worked near the National Transit pump station. At such times Reed practiced with the telegraph key. In this way he became sufficiently proficient to take a job as telegraph operator and field clerk near East Sandy, Pa., for the Oil City Fuel Supply Co., one of the Standard group. With his wife and two-year-old daughter he occupied a little house in a clearing. He was subject to call 24 hours a day and had a telegraph instrument and a telephone in both his office and his dwelling. He solved the problem of making a garden and still keeping within sound of the telegraph instrument by installing an extension line connected to a key and sounder on a stump near which he cultivated his corn, peas and turnips.

Visit from the President

Reed soon was shifted to Dubois, Pa., as telegraph operator and gas ledger man. He made a record for accuracy and promptness here. Probably that is how it came about that he had been in Dubois only nine months when E. Strong, president of the company, entered the office one day just as Reed was closing his ledger.

"Beardsley, you won't need to open that ledger again," said the visitor.

"Am I fired?" asked Reed as a sharp memory of those free-lunch days in Chicago flashed through his brain.

"No," was the reassuring reply. "J. B. Crawford, treasurer of the company, wants you in his office in Oil City."

The change was made at once. A hard task awaited Reed. The records of field investment and operations, involving a complicated working agreement with T. N. Barnsdall, had been in operation 13 years. Contract stipulations had not been observed and the records never had been put in balance. The main office auditors in New York had reported the records and the accounting of operations as being "a mess." Reed was asked to set them right.

"How are you getting along?" inquired Mr. Crawford after Reed's first day in the office.

"Haven't started yet," was the reply.

The same question the next day elicited the same answer. On the third day when Mr. Crawford wanted to know what progress was being made Reed responded: "Mr. Crawford, I'm going to do this on a plan that will insure the books and operation settlements being correct when I get through."

The Plan? Why There Isn't Any

"What is the plan?" said the treasurer.

"Don't know. Haven't got one yet."

The plan as eventually formulated comprehended starting at the beginning of the company's contract and working up a balance and corrected settlement for each month before going on to the next. It required almost a year to complete the job, but when it was done the office had a set of records that were balanced and in agreement with the terms of the contract.

The general ledgers were put in Mr. Beardsley's care after that and gradual promotions came thenceforth. In 1907 he was made treasurer of the Mountain State Gas Co. and the River Gas Co., subsidiaries of the Standard Oil Co. of New Jersey. The next year these two companies, as a result of the court decree splitting up the Standard Oil Co. into its constituent organizations, were put under the same management as the Hope Natural Gas Co. in Pittsburgh, and Mr. Beardsley was transferred to that city. In 1910, the Hope absorbed the Mountain State Gas Co. and the West Virginia operations of the River Gas Co. At the same time Mr. Beardsley was made assistant treasurer of the Hope company.

Becomes General Treasurer

In 1918 Mr. Beardsley was made treasurer of Hope and in 1921 he was advanced to his present office, that of general treasurer of all the Standard group of natural gas companies having headquarters in Pittsburgh. The largest of these are the Hope Natural Gas Co. and the Peoples Natural Gas Co. He serves as a director on a number of boards and is a member of their executive committee.

Mr. Beardsley is a member of the accounting managers committee and the uniform accounting committee of the American Gas Association. He is chairman of the subcommittee on uniform accounting for natural gas companies. In college he was taken into Sigma Alpha Epsilon fraternity. Mr. Beardsley pays a warm tribute to his wife for her loyalty and grit in the days of adversity. All their five children are married and Mr. and Mrs. Beardsley live alone once more in a pretty home in Pittsburgh which is in striking contrast with the old home in East Sandy with its telegraph instrument on a stump beside the garden.

Most men have hobbies. They fish, hunt, save postage stamps or raise Airdales. It might be said that Mr. Beardsley's hobby is collecting old school bells. He has collected only one so far, but he has had that one for half a century and his solicitude concerning it is comparable to the fussiness of a hen with one chick. In the old Mill Village school a hand bell, rung by the teacher or a pupil, summoned the children to their books morning, noon and at the end of recess periods. This bell, inclusive of handle, was 14 inches long.

Sh-sh-sh! Somebody at the Window!

Reed was 10 when the old one-room school building was remodeled into a two-story structure with a belfry containing a rope-operated bell. When school was dismissed on the last day of the term preceding this change one window of the old building was left unlocked. (A certain 10-year-old urchin saw to that.) After darkness had fallen that night this window was raised cautiously and the same urchin crawled stealthily inside. When he emerged the old hand bell emerged with him. Its strange disappearance was unexplained.

In June, 1929, Mill Village had a homecoming celebration, which brought back scores of its old-timers. Early in the morning of the big day of the celebration residents were aroused by the insistent clangor of a bell. Going to doors and windows they beheld an automobile moving slowly through the streets. It contained Reed Beardsley and his cousin, Ernest E. Beardsley, cashier of the First National Bank of Point Marion, Pa., and the latter's son, James Beardsley. Reed Beardsley's strong right arm was swinging the primitive hand bell which in the long ago had called Mill Village boys and girls to school. White-haired men and women recognized the ancient relic and a mystery of 50 years was a mystery no longer.

WEST TEXAS FIELDS

(Continued from Page 70)

total depth 2,936 feet, formerly completed with initial production of 20 bbls. on September 1, 1926. Same company's No. 106 University, plugged, total depth 3,103 feet, formerly completed with initial production of 80 bbls. on February 19, 1927. Same company's No. 1-C University, total depth 8,668 feet, increase in oil and gas at this depth, initial production 320 bbls. per day. Same company's No. 2-C University, top pay 8,187 feet, initial production 1,159 bbls., total depth 8,603 feet. Texon Oil & Land Co.'s No. 3-B University, top pay 8,517 feet, initial production 236 bbls., total depth 8,633 feet. Texon Oil & Land Co.'s No. 7 University, completed April 29, 1925, at total depth of 2,960 feet and initial production of 5,040 bbls., plugged back to 854 feet, and completed for water well.

Sterling County

B. C. Mann and others' No. 1 Neal Reed, dry and abandoned, total depth 2,202 feet.

Terry County

Midwest Exploration Co., Penn and Atlantic Oil Producing Co.'s No. 1 Carlisle, dry and abandoned, total depth 5,001 feet.

Upton County

The Texas Company's No. 1 Perry, dry and abandoned, total depth 2,040 feet, formerly completed June 25, 1927, for 253 bbls., top pay was 1,963 feet.

RUNS THROUGH TRUNK LINES

Company, size, location—	Prod.
Atlantic, 10-inch, Houston	30,061
Gulf, 10-inch, Ranger	40,210
Humble, 2-8-inch, San Angelo	22,027
Humble, 10-12-inch, Station "A"	52,909
Illinois, 2-8-inch, Del Rio	31,500
Magnolia, 8-inch, De Leon	26,329
Pasotex, 8-inch, El Paso	12,853
Shell, 10-inch, Healdton	36,293
Shell, 10-inch, Houston	26,281
Texas, 12-inch, Houston	11,432
Total	289,905

RUNS TO WEST TEXAS REFINERIES

Amarillo Ref. Co., Pyote	0
Big Spring Ref. Co., Big Spring	1,363
Burford Ref. Co., Pecos	3,744
Bluebonnett Ref. Co., Wickett	0
Cosden Ref. Co., Big Spring	2,162
Col-Tex Ref. Co., Colorado	6,500
Great Western Ref. Co., Big Spring	2,886
Humble Oil & Ref. Co., McCamey	11,357
Mid-Tex Ref. Co., Midland	0
Richardson Ref. Co., Big Spring	2,771
Tonkawa Ref. Co., Pyote	1,476
Wickett Ref. Co., Wickett	160
Total	32,423

TANK CAR SHIPMENTS

Fox and Thorsen from Mertzon	160
Orient from Hurdle	85
Southern Crude from Wickett	8,465
American from Pyote	10,248
Total	18,977

Total daily average distribution	341,306
Total daily average production (including Lea County, New Mexico)	329,880
Daily average from storage	11,425

PANHANDLE FIELDS

(Continued from Page 71)

tion 10 bbls. oil and 3 bbls. water; total depth 1,345 feet.

Callahan County

Holden, Wakefield and others' No. 1 Hobbs, dry and abandoned; total depth 1,060 feet. Meredith & Benton's No. 1 Berry, dry and abandoned; total depth 932 feet.

Coleman County

Lloyd Oil Corp.'s No. 13 Bartholomen, gas sand 1,432-34 feet, oil sand 1,434-36 feet, initial production 25 bbls.; total depth 1,440 feet. Matlock and others' No. 1 Fletcher, location abandoned.

Eastland County

Williams and others' No. 1 Hutcherson, shot with 100 quarts from 3,330-90 feet and 60 quarts from 3,470-3,510 feet, initial production 150,000 feet of gas; total depth 3,591 feet. Lone Star Gas Co.'s No. 1 Mitcham, top pay 3,825-55 feet, initial production 843,000 feet of gas; total depth 3,855 feet.

Erath County

Texas Pacific Coal & Oil Co.'s No. 1 Diaz fee, initial production 1,543,000 feet of gas from 1,589-1,613 feet and 1,635-44 feet; total depth 2,000 feet.

Palo Pinto County

Bennings and others' No. 1 Hinkson, dry and abandoned; total depth 1,400 feet.

Stephens County

Brown and others' No. 7 Riddle, top pay 1,824 feet, shot with 30 quarts at 1,824-54 feet, initial production 6 bbls.; total depth 1,882 feet.

Throckmorton County

M. L. Hay's No. 1 Wright, dry and abandoned; total depth 1,506 feet. Magnolia Petroleum Co.'s No. 1 Richards, dry and abandoned; total depth 3,685 feet.

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TIMKEN *Tapered Roller* **BEARINGS**

Lucas County, Ohio, Test Important

Central Ohio Fields to Get More Active Play. Nine New Locations and 21 Started Spudding. Twenty-Seven Completions

By Whit
Staff Correspondent, Central West Fields

FINDLAY, Ohio, Aug. 18.—While development work in the oil fields lags some, the Central West Field as a whole is bound to get a more active play in the way of test work. The most important and interesting completion of the week was the bringing in of a test by Dillon & Weed on the Dale C. Teft farm, Section 29, Monclova Township, Lucas County, on the Salisbury road, west of Maumee. This well is estimated as a 50-bbl. initial pumper from the Trenton Rock. This firm recently drilled a first test in what looks like a new field on the Henry Butz farm, SW, Section 28, Monclova Township, and 4 miles in advance of production, producing an initial of 12 bbls. from a depth of 1,335-85 feet. Other wells will be started as soon as drilling outfits can be gotten into the territory. The owners of the new well are R. B. Weed, geologist, of Columbus, Ohio, and Cliff Dillon of Cleveland, with a block of around 1,000 acres to develop.

Margaret E. Grace has drilled in her No. 1 well, 600 feet from the south line and 300 feet from the east line of the Gus Clay farm, SW, Section 16, Union Township, Mercer County, the drill penetrating the Trenton formation 46 feet to a total depth of 1,184 feet, and may make a small pumper.

The Kansas-Ohio Oil & Gas Co.'s second test, 500 feet from the north line and 600 feet from the east line of the R. E. Harrison farm, known on the oil map as the T. Farrel farm, NE, Section 1, Jackson Township, Seneca County, which produced an initial of 40 bbls. from 1,282 to 1,330 feet.

Lewis Hille drilled No. 5, 1,300 feet from the south line and 400 feet from the west line of the Herman Linke farm, SW, Section 18, Woodville Township, Sandusky County, which produced 7 bbls. the first 24 hours from 1,235 feet.

Blanchard Oil & Gas Co.'s test on the Phillips J. Kirt farm, Section 5, Blanchard Township, Hardin County, reported showing a gas volume of around 150,000 feet, from 1,332-52 feet, total depth, 1,380 feet.

Newcomer and others drilled a test on the Jacob Koonsman farm, Section 26, Texas Township, Crawford County, which proved dry from 1,777 to 1,877 feet.

In the Kenton Field of Hardin County, Eagon & White are starting a test on the Adam Strang farm, Section 14, Cessna Township, and the Ohio Fuel Gas Co. is drilling No. 4 C. A. Robinson farm, same section.

Honey Creek Oil Co. is drilling a test on the C. H. Borton farm, Section 33, Scipo Township, Seneca County. Williams and others have a light oil and gas showing in a wildcat on the Henry Stuckey farm, in Bloom Township, Seneca County, of the Tiffin Field.

CENTRAL OHIO

Twenty-seven wells are reported completed in the Central Ohio Field, of which 10 were dry, 11 gas wells, and 6 oil wells with an initial production of 351 bbls. Nine new locations were staked and 21 wells started spudding, a total in new work of 30.

In Ashland County, Jackson Township, the Ohio Fuel Gas Co.'s No. 1-5193 Frank Kline, Section 14, is a gas well and its No. 1-5192 John Keeler, Section 2, same township, was a dry hole in the Clinton lime. Same company found no sand in No. 1-5204 Luella C. Ford, Section 31, Orange Township, and it is dry. Same company's No. 1-5144 Charles Swineford farm, Section 6, Perry Township, is a gas producer.

In Medina County, Lafayette Township, the Ohio Fuel Gas Co. has a dry hole on the W. J. Richardson farm in Section 19, and a gas well in No. 1-5195 on the Mable B. Spicer farm, Section 21, same township. Same company's No. 1-5191 Frank Henry farm, Section 8, Harrisville Township, was also dry, no sand being found.

In Lorain County, Carlisle Township, a dry hole was found by the Ohio Fuel Gas Co. in No. 1-5121 Julia A. Clark farm, Lot 8. Elyria Steel Corp. is starting a test on the Albert M. Hanndford farm, Section 19, same township, and the Wiser Oil Co. made a location on the Thomas A. Conway farm, Section 6, same township.

In Wayne County, Congress Township, Harmon & George have a light gas well in No. 3 on the Clayton Good farm, Section 36, from 2,890-99 feet.

In Knox County, E. J. Edmonds is drilling on the Robert Stair farm, in the third-quarter of Newton Township. In Monroe Township, Upham Gas Co. is drilling on the William Henwood, Section 7, and made a location on the Jesse White farm, Section 23. Bell Brothers made a location on the Frank Spearman, Section 23, Union Township, same county, and Harry G. Hammond is drilling No. 8 on the Hammons farm, same section.

In Coshocton County, Bethlehem Township, Dugan-Sloan Oil & Gas Co.'s No. 13 H. J. Adams, Lot 40, produced 10 bbls. initial from 1,045-70 feet. McClay Brothers are drilling a second test on the Ashcraft heirs, Section 16, Pike Township.

In Licking County, Fallsbury Township, the Preston Oil Co.'s No. 1-1419 Sarah Martin farm, Section 13, pumped 45 bbls. from 2,965 to 3,017 feet, total depth 3,033 feet. Emerald Petroleum Co. has a light gas well in No. 1 Charles A. Weakly farm, Section 17, same township, and I. C. Robinson made a location on the C. H. Kidd farm, Section 5, same township. Ohio Fuel Gas Co.'s No. 1-5182 Edward Goldsmith farm, Section 18, Hopewell Township, is a gas well from 2,902-46 feet.

Muskingum County

In Muskingum County, Harrison Township, Donohoe and others' test on the A. P. & J. W. Rusk, Section 17, pumped 5 bbls. from the Berea sand from 1,050-73 feet, total depth 1,095 feet. H. C. Farmer and others are drilling on the Salema M. Stansberry farm, Section 20, same township. In Jackson Township, same county, the Pure Oil Co.'s test on the Frank McKee farm, Section 6, Jackson Township, pumped 53 bbls. from 3,047-92 feet.

In Athens County, Berne Township, Carpenter & Glaziers' No. 9 H. D. and C. C. Curtis, fractional Section 33, was dry in the Cow Run sand at 218 feet. In Lodi Township, the Ohio Fuel Gas Co.'s No. 1-5225 O. F. Lowther farm, fractional Section 7, was dry at 1,666 feet, and No. 2-5228 Francis Sargent farm, in fractional Section 36, same township, is a gas well at 1,543 feet. Ohio Fuel Gas Co. found a fair gas well in No. 1-5235 C. E. Woodi, Section 25, Carthage Township, from 1,125-31 feet, in the Maxon sand. Kachelmacher estate, started a test on the Charles Wilson farm, Section 4, Trimble Township.

In Tuscarawas County, Oxford Township, Ohio Fuel Gas Co.'s No. 1-5136 Harry McFadden farm, Sections 21-22, is a gas well at 3,609 feet. Wehrle Co.'s test on the F. J. Euga farm, Lot 27, Salem Township, same county, is dry at 4,500 feet and the casing is being pulled. In Bucks Township, same county, the same company's No. 1 Snyder-Bixler farm, Section 5, was dry at a depth of 1,169 feet.

In Guernsey County, Wheeling Township, Ohio Producers & Refining Co.'s No. 1 Lizzie Little farm, NE, Section 1, produced an initial of 120 bbls., from the Niagara formation at a total depth of 3,690 feet. In Monroe Township, the East Ohio Gas Co. along with the Capital Drilling Co. drilled in a test on the Albert Little farm, Section 5, reported good for 118 bbls. from a depth of 3,664 feet. Ohio Fuel Gas Co. has a duster in No. 1-5232 M. V. Hollingsworth farm, Sections 1 and 10, at 1,145 feet.

In Belmont County, Somerset Township, Fulton, Peters and others' No. 3 H. E. Slevin, is a dry hole in the Berea sand from 1,966 feet.

The Oko Oil & Gas Co., of Lima, Ohio, made a nice shallow strike in No. 38 on the Henry Essig farm, Section 13, Chatham Township, Medina County, which produced an initial of 40 bbls. from a depth of 284 feet, while the same company's No. 31 Jess McVicker farm, Section 2, same township, pumped 10 bbls. the first 24 hours.

The Everette Gas Co.'s No. 4 well on the Dan O. Flenner farm, Section 13, Hanover Township, Licking County, produced an initial of 60 bbls. at 2,902 feet, and the Pure Oil Co.'s No. 3 Ed Hickey farm, Section 16, pumped 5 bbls. from 2,920 to 3,064 feet.

INDIANA

The important find of the week in the Indiana Field was the bringing in of a gas well by the Two Rivers Oil Corp. in No. 1 Jacob Bussard farm, a short distance south of Huntington, in Huntington County, in the old Trenton Rock area of the State, which is reported with a volume of 1,000,000 feet, and may bring about a greater activity in development work in that section of the State, as gas is one of the products that is attracting much attention at this time.

Another important test, while not large, shows without doubt that oil and gas in commercial quantities will be found in Steuben County, the extreme northeastern county of Indiana, where the Cousins Oil & Gas Co. penetrated the Trenton formation in No. 1 on the Hissong farm, near Ashley, and close to the division line of Steuben and DeKalb Counties, and southwest of Angola. The Trenton was reported topped at 2,333 feet and a small oil showing was found at 67 feet in, a total depth of 2,400 feet. To the north, in Branch County, Michigan, near the town of Coldwater, a structure is known to exist since the early days of the development in the old Lima Field, but has never been given a test, although in the early '90s leases were secured but no tests were made. Steuben County has about as much of its acreage in lakes as in farming lands.

A test drilled by Holeman and others on the Sturdevant lands, Section 20, Washington Township, Hamilton County, and north of Indianapolis, is reported dry.

Henderson Brothers drilled a dry hole on the Loretta Sells, Section 10, Jackson Township, Randolph County, being 400 feet in the Trenton lime, without any showing of oil. The Parker Field, in the northwest part of the county, and east of Muncie, had quite a productive field in the early days of the Indiana Field, some very large wells having been found there.

Wood Oil Co. drilled a test on the Y. L. Farnsley farm, in Franklin Township, Floyd County, in the extreme southern part of the State, but found a dry hole. Other ventures are being made in this county of which New Albany is the county seat.

In the southwestern part of the State, the Indiana Southern Gas Utilities Co. found a dry hole on the J. F. McWilliams farm, SE, Section 33, Hart Township, Warrick County.

In Pike County, Washington Township, in the Princeton Field, the Bement Gas Co.'s No. 3 well on the Aaron George farm, Section 29, is reported with a gas volume of 1,500,000 feet, and C. C. Taliaferro, Jr.'s No. 4 on the Lew George farm, same section, reported with a volume of 1,000,000 feet at 1,127 feet.

INDIANA OIL AND GAS NEWS

Compiled by Paul F. Simpson, State Gas Supervisor, Department of Conservation, Division of Geology, Indianapolis, Ind., by counties:

Adams County—George Lacknett recently completed his second well on the Baker heirs farm, in Jefferson Township. The initial production was 10 bbls.

Daviess County—A well is reported being drilled one mile north of Sandy Hook in Veale Township. Hensley & Ross are deepening their test on the Ross farm in Sandy Hook to the second sand.

Elkhart County—O. P. Coffin and others have leased several thousand acres in Jefferson and Washington Townships.

Floyd County—The Wood Oil Co. plugged its test on the bank of the Ohio River in Franklin Township after having drilled through the Corniferous limestone. It moved the rig from the Y. L. Farnsley farm to the W. H. Colley farm in the same township, Section 24, where it expects to test the Trenton. The W. E. Hines Co. has moved a rig to the Nute Marton farm, 2 miles northwest of New Albany. A third company is said to be starting a test in this county.

Gibson County—The Big Four Oil Co. completed its fourth well on the C. T. Sloan land in Section 18, Washington Township. It produced 55 bbls. natural from a sand at 1,257-62 feet.

Greene County—A. R. Morris and others have taken a lease near Lyons, where a small production was reported many years ago.

Hamilton County—Holeman and others plugged their test on the Sturdevant farm, in Section 20, Washington Township. After drilling 80 feet in the Trenton, only a showing of oil and gas were found. Another test may be drilled on their block of acreage.

Huntington County—The Two Rivers Oil Corp. completed its first well on the Jacob Bussard lease, south of Huntington, where 1,000,000 feet of gas was found in the Trenton. Other tests are planned.

Jasper County—An attempt is being made to reopen the shallow field in Gillam Township, 22 wells having been cleaned out and are on the pump.

Jay County—George F. Edington has started a well on the Peter F. Edgington land, 3 miles southwest of Bryant, in Section 14, Jackson Township. The Flemwell Oil Co. has started a well on the C. C. Harris farm, 2 miles north of Pennville, in Section 16, Penn Township. Milligan & Brown are rigged up in the Smith stone quarry, 2 miles southwest of Portland, in Wayne Township.

LaGrange County—The well on the Clair Shoup farm is being delayed at 1,100 feet while a broken bit is being fished for.

Monroe County—The Petroleum Exploration Co.'s test on the Claude E. Kinser No. 1, in Salt Creek Township, is a dry hole.

Morgan County—The Petroleum Exploration Co.'s test on the E. S. Langford farm, in Ashland ownship, was dry.

Perry County—Roger E. Kirkwood and others are moving a rig to make a test near Leopold, probably in Section 11, Roger E. Williams and others will drill

(Continued on Page 183)

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Lack of Water Is Eastern Handicap

Lower Pennsylvania and West Virginia Distressed by Shortage. Best Wells of Week in Southeastern Ohio

By Special Correspondent

PITTSBURGH, Pa., Aug. 18.—The initial production of new oil wells completed in the eastern fields during the past week amounted to 443 bbls., mostly all of which was reported from southeast Ohio. The fields in lower Pennsylvania and in West Virginia are still in distress over the acute water shortage, there having been no relief since the previous report.

The largest well reported was in the southwest quarter of Section 13, Fallsbury Township, Licking County, southeast Ohio, where the Murphy Petroleum Co. and others completed their test well on the Eli Clark and others' farm to the Clinton sand at 3,025 feet and after shot it produced 120 bbls. the first 24 hours. In Holmes County, the East Ohio Gas Co. completed a fair well on the McCullough farm, Lot 28, Hardy Township. It was drilled to the Clinton sand, a depth there of 3,500 feet, and it made 15 bbls. natural the first day, which increased after shot to 96 bbls. the next day.

SOUTHEAST OHIO

In Coshocton County, the Preston Oil Co. completed a test on the John R. Rine farm, NW, Section 16, Perry Township, which produced 95 bbls. the first day after shot. It was completed in the Clinton sand at 3,241 feet. The No. 5 well of the Kachelmacher estate was completed on the Hemlock Coal Co. property, Section 25, Coal Township, Perry County. It was drilled to the Clinton sand at 3,656 feet and after shot made 85 bbls. the first day.

In Ashland County, the Great Lakes Oil Co. drilled a dry hole as its No. 6 on the W. S. Wolf farm, Section 16, Lake Township. This well was completed in the Berea at 700 feet. In the northwest quarter of Section 1, Brush Creek Township, Fairfield County, Murl Myers had a similar result in his test on the F. Zortman farm. This, however, was drilled to the Clinton at 2,680 feet and, all sands being unproductive, will be abandoned.

In Hocking County, the Preston Oil Co. completed a test in a new section of the Sunday Creek Coal Co.'s property. In the center of Section 10, Ward Township, this company completed No. 1,422 to the Clinton sand, 3,601 feet, and after shot it produced 26 bbls. the first 24 hours. This is the only well that has been drilled in this section, and it will be watched with interest.

Three Licking County Wells

Licking County had three other completions. In Lot 18, Hopewell Township, the Preston Oil Co. completed a test on the Edward Goldsmith farm to the Clinton sand and it is a gas well estimated good for 150,000 feet making about a barrel of oil a day with the gas. In Section 11, Franklin Township, Charles H. Vaughin and others completed their No. 8 on the D. E. Dusthimer farm to the Berea at 760 feet and it is showing for a 2-bbl. pumper. In Lot 5, Newton Township, E. J. Edmonds and others drilled a test on the Robert Stair farm to the Berea at 690 feet and it is a duster.

In Muskingum County, there were two fair gassers completed. The Ohio Fuel Supply Co. completed its test on the Orville Dozer farm, SE, Section 5, Brush Creek Township, to the Clinton at 3,960 feet and it is good for 1,250,000 feet. In the northeast quarter of Section 19, Perry Township, the Ohio Fuel Gas Co. completed a test on the C. Urban farm, also to the Clinton sand at 4,360 feet, and it is estimated good for 500,000 feet. In Washington Township, the Atha Oil Co. completed a test on the Benjamin Duer farm to the Clinton at 3,872 feet and it is a dry hole.

There were two additional completions in Perry County. In the northwest quarter of Section 17, Hopewell Township, the Ohio Fuel Supply Co. completed its test on the E. E. Mechling farm to the Clinton sand and the well had a light showing of oil and will probably be plugged. This tends to mark the limit in this direction of a very productive pool. The Allegheny Oil Co. had a duster in its well No. 18 on the W. C. Longstreth farm in Scetion 32, Pleasants Township. It was drilled to the Berea at 1,128 feet.

WEST VIRGINIA

The largest oil well completed in West Virginia during the week was in Reedy district, Wirt County, where the Virginian Gasoline & Oil Co. completed its test well on the Phoebe Woodyard farm to the Berea sand and it is showing for 10 bbls. a day natural. In Calhoun County, the same company drilled its No. 2 on the C. C. Morris farm, in Sherman district, to the Injun sand at 2,010 feet and it will make a 5-bbl. pumper natural.

In Ravenwood district, Jackson County, on Buck Run of Sandy Creek, the Capital City Oil & Gas Co. completed its No. 2 on the A. S. Gray farm to the Berea and it is showing for 4 bbls. a day natural.

Gas Wells

In Braxton County, the Philadelphia Natural Gas Co. completed its No. 7,562 on the C. R. Bourne farm in Birch district to the Injun sand at 2,954 feet and it is a fair gas well without shot.

In Calhoun County, there were three gas wells completed. The largest was in Center district, and on the Bennett heirs farm, where W. H. Bickel completed his No. 2 to the Injun sand at 1,780 feet and it is a good gasser. In Sheridan district, the Chemical Oil Co. drilled its test on the Clara B. Holbert farm to the Berea and then to the Injun and have a fair gasser from both sands. In the same district, Ira Haught and others completed his test on the Alva Elder farm, also to the Injun sand and at 2,019 feet, and it is showing for a fair gas well natural.

In Gilmer County, McCall & Co. drilled its No. 1 on the Erwin Snider farm in Center district deeper to the Injun at 2,014 feet and it is showing for a light gas well from that sand. In Lewis County, the same company completed a good gas well on the B. Shea heirs farm in Courthouse district. It was drilled to the fifth sand at 2,505 feet and will make over 500,000 feet a day.

Marion County

In Marion County, Lincoln district, the M.W.P.P. Service Co. drilled its test on the E. D. Toothman farm and reached the top of the Fifth sand at 2,786 feet. It was completed at 2,810 feet showing for a small gas well. In Pleasants County, B. F. Webb & Co. drilled their test on the M. Swain farm in Union district to the Cow Run at 710 feet and it is making a show of oil. The well is shut down for a test.

In Ritchie County, the West Virginia Utility Co. completed its test on the W. M. Cunningham farm at 2,141 feet and it was dry in all sands and is being abandoned. In Tyler County, Robinson Brothers completed their test on the William Keller farm in Union district, and it is a duster at 1,690 feet.

In Roane County, the United Fuel Gas Co. completed its No. 4,212, a test on the Jessie Savage farm, to the Injun at 1,837 feet and it is showing for 250,000 feet. This farm is in Smithfield district. In the same district, the Union Gas Corp. completed its test well on the W. T. Eppling farm to the Injun sand and it is estimated good for 250,000 feet.

SOUTHWEST PENNSYLVANIA

In southwest Pennsylvania drilling is at a standstill also due to the lack of water. During the week two completions were reported. The more interesting was an old gas well purchased by Bissett & Gray on the W. L. Bennett farm and drilled deeper to the Fifth sand at 3,150 feet. It filled up 2,800 feet in the hole and for a while about 40 bbls. a day was swabbed from it. It is estimated it will settle down to an 8-bbl. pumper. This well is about a mile from Deep Valley and in Springhill Township, Greene County. In the same county but in Perry Township, the Chartiers Oil Co. completed its test on the Spencer Kennedy farm to the Bayard sand at 2,957 feet and it is showing for a very fair gas well.

New Work

In Boone County, C. P. Jones & Co. have rigged up for a test on the H. H. Hill farm in Washington district. In Cabell County, W. H. Kirtley & Co. are drilling their test on the Emma and Fannie Hanley farm, Grant district, and have reached 1,260 feet. On the waters of Bells Run, Center district, Calhoun County, B. J. Crawley has rigged up on the Florence Pell farm. In Sheridan district, the Chemical Oil Co. has a rig ready for No. 2 on the A. H. Fling farm. In the same county, the United Fuel Gas Co. is drilling No. 3 on the Carr Shafer farm in Lee district. In Sherman district, the Virginian Gasoline & Oil Co. is ready for No. 3 on the Armidia Elliott farm.

In Courthouse district, Lewis County, Morran Brothers have completed a rig for their test on the G. O. Alliman farm. This location is about 2¾ miles northeast of Kemper post office. On West Run of Reedy Creek, Reedy district, Wirt County, the Heck Oil Co. is drilling a test on the H. L. Vandall farm.

MANY COMPLETIONS IN KENTUCKY BUT ONLY NORMAL PRODUCERS

By Whit

Staff Correspondent, Kentucky-Tennessee

OWENSBORO, Ky., Aug. 18.—The shutdown movement inaugurated on August 1, in the Owensboro and Western Kentucky Fields will no doubt bring about better results, as no new wells completed will be connected to the oil lines until the expiration of the shutdown on September 1. This does not mean that no wells will be drilled in the active field, as many will be put down to the pay sand and closed in until the expiration of the shutdown period and much test work will be done.

Since the last review of Kentucky there has been a large number of completions, but none proved to be rich finds, only normal producers, along with the dry holes and gas wells, there being 6 of each of the latter and 20 oil wells, which showed only an initial production of 415 bbls. The best oil producer was found in the old Bowling Green Field, of Warren County, where H. Julian and others' No. 2, 600 feet from the south line and 1,200 feet from the east line of the M. Reeves No. 2 farm, 5 miles north of Bowling Green, flowed 400 bbls. from a depth of 435 feet, then drilled to a total depth of 465 feet, where it was put on the pump and showed 80 bbls. initial, one of the best wells drilled in the old field for a number of years. Southwest of Bowling Green, Shriver and others drilled a second test 1,000 feet from the north line and 600 feet from the west line of the John Sennabaugh farm, which proved dry at a total depth of 1,150 feet.

Ohio County Wells

The productive Stray sands found in Ohio County during the past week or so have failed to show the usual large wells that have been the case during the past year or so, but there are still large areas of untested territory in the county. Some favor further test work south of the Rough River fault, as very few tests have been made so far south of the fault, where lies the largest area of Ohio County.

S. R. Berry and others' No. 4 on the Will Coleman 125 acres, in the Coleman Pool, was dry in the Stray sand at 450 feet.

S. H. Russell's No. 6 on the James Hord'in farm, in the Deanfield Pool, is a fair gas well in the Stray sand at 476 feet. Harry Ogle also found a fair gas producer in the same formation on the Pat Howard lease.

Chester Oil Co.'s No. 12 on the Martha Medcalf 93 acres, in the Deanfield Pool, produced an initial of 15 bbls. from the Jett sand at 406 feet. Same company has what is reported an excellent showing in the Stray sand at No. 6 on the G. W. Patten farm, in the Burford Field.

Louisville Gas & Electric Co.'s No. 10, 800 feet from the north and west lines of the R. A. Miller 175 acres, produced 10 bbls. the first 24 hours.

Near Reynolds Station, in northern Ohio County, the Wood Oil Co.'s No. 2 on the Josh Griffith farm, produced an initial of 30 bbls. from 478 to 491 feet, total depth, 502 feet.

J. E. Hare and others' second test on the A. D. Kirk 50 acres, in the Deanfield Pool, pumped 25 bbls. initial from the Barlow sand at 700 feet.

In the Magan Pool, Fred Hupp and others found a dry hole in No. 3 on the Myrtle Brown 55 acres, at 685 feet.

James C. Ellis found a dry hole in No. 1 on the Lucy Taylor farm, in the

(Continued on Page 173)

AUDIT VIRGINIA TAX REPORTS

WASHINGTON, D. C., Aug. 16.—An audit of 117 gasoline distribution companies doing business in Virginia has been started, according to T. McCall Frazier, who is in charge of gasoline tax collections for that State.

"An examination of the books for three of the smaller companies showed that they were not as careful as they should be in making reports to the State," Mr. Frazier says.

No charge of dishonesty followed these audits, Mr. Frazier explains, but the errors discovered resulted in the collection of about $5,000 additional gasoline tax money and it was then decided to audit all the companies.

AIR INDUSTRY SURVEY

June 30 there were 9,773 licensed and identified aircrafts, 13,041 licensed pilots of all classes, and 8,843 mechanics in the United States, according to the aeronautics branch of the Department of Commerce. Of the total number of pilots, over 43 per cent were holders of private licenses, while over 41 per cent were transport pilots, 14.4 per cent limited commercial, and 1 per cent industrial.

California not only had the largest number of licensed and identified aircrafts, but also led all other states in the number of licensed pilots and mechanics. Second place was held by New York.

Out of loss . . . . . a gain

When the great war placed an embargo on imports from the Central Powers', American industry found itself deprived of many necessary products. Among them the standard asbestos sheet packing then in general use.

A substitute had to be found. Accordingly Crane Co. procured every sheet packing that could be obtained commercially in the open market and tested it. Using the old one as a basis of comparison, not one was found which could equal its tensile strength, compressive strength, or heat resistance.

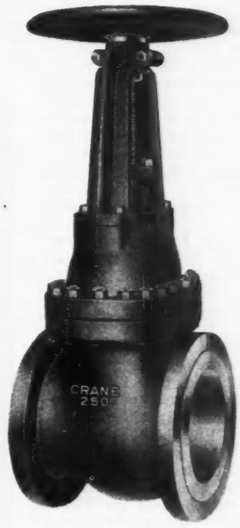
So the best American sheet was chosen and its manufacturer called in. Experiment after experiment, test after test was made until a sheet was produced that not only equalled but *surpassed* the imported product . . . that showed a tensile strength of 5500 pounds per square inch against 4000, a compressive strength of 60,000 pounds per square inch against 50,000, and an equal resistance to heat.

This sheet was named *Cranite*. In actual service it has more than justified the high expectations founded on its performance in the laboratory. Today it is setting the standard for packing in cold oil pipe lines, natural and manufactured gas lines, benzol lines, saturated steam, superheated steam, ammonia, hot water, oil, and some acid installations.

The story of *Cranite* is typical. For 75 years Crane Co. has striven unceasingly to produce and sell only materials of the highest quality. When progress calls for entirely new materials, or circumstances force a substitution, our engineers are never satisfied until they have made that product or that substitute surpassingly fine.

To assist power and plant engineers to get the greatest efficiency out of its valves, fittings, and piping materials, Crane Co. keeps a group of specialists ready to confer at any time. A wire will summon one of them.

1855
SEVENTY-FIFTH
ANNIVERSARY
1930



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Natural Gas Industry Developments

OPEN SECOND GAS FIELD NEAR KANSAS CITY, MO.

KANSAS CITY, Mo., Aug. 16.—Two gas wells were added this week to the expanding gas fields in Wyandotte County between Piper and White Church, Kans. The second new well was drilled in with a production of 500,000 feet. The first was drilled in with the same production. Both strikes were on the farm of Frank Albang. The drilling is being done by Frank E. Messler, head of a drilling syndicate holding contracts to drill on several farms in the vicinity.

The syndicate now has five wells on the farm of L. D. Jaccard, with a production of 2,190,000 feet. Mr. Messler said plans were going forward to drill the field to its capacity. Associated with him is a group of Kansas City business men who believe the shallow gas in Wyandotte County will develop into a profitable field.

Besides the drilling by the syndicate, the county also has drilled on a site at the Wyandotte County Home for the Aged and has struck both gas and oil. Drilling also has been done on the farm of former Senator James F. Getty and several independent wells have been drilled by the land owners.

Development of the gas field, Mr. Messler said, will be carried out as rapidly as the wells can be drilled. Plans have been formulated by the business men to organize a pipe line company for the delivery of the gas to the city.

The Piper-White Church area is the second gas field development started in the county last year. Discovery of gas in paying quantities in the Fairfax Industrial district and on the Fairfax Airport resulted in 16 wells being drilled in that vicinity. That gas now is piped to the gas mains in the city and is being sold to the gas company.

GREAT FALLS RATES REDUCED

CASPER, Wyo., Aug. 16.—Reductions in gas rates have been announced by William Baehr, head of the public utility interests that control the Great Falls Gas Co. The new rates will go into effect August 10. The minimum rate of $1.50 for service will not be changed. The new scale must first receive approval of the State Public Service Commission. Mr. Baehr announced the new schedule after conferring at Denver with Lee Dennis, chairman of the Montana commission.

The new schedule provides for sale of the first 5,000 feet each month at 67½ cents instead of 75 cents. Those using 50,000 feet a month would pay $25.88 compared to $28.50. Those using 100,000 feet a month would save $5.12, while consumers whose meters show 500,000 feet monthly would save $38.62 or slightly less than 18 per cent. On the first 1,000,000 feet each month, the saving would be $72.62, or nearly 18 per cent.

LEWISTOWN GAS PROJECT

CASPER, Wyo., Aug. 16.—Broadview Oil & Gas Corp. has made an agreement with the Minnesota Northern Power Co. to drill a gas well on Broadview Dome, 30 miles northwest of Billings, Mont., to develop a supply for the latter company which owns franchises in Lewistown and other towns in the vicinity. The agreement is to drill six tests during the ensuing six months at locations to meet the requirements of the geologists of the purchasing company. It is understood a test is to be started soon in the vicinity of Roy and Fergus, not far from the test drilled and abandoned by the California Co. four years ago. This well got gas which required 13 tons of cement to shut off.

LAST INDEBTEDNESS REMOVED FROM A.G.A. LABORATORY IN CLEVELAND

Prominent executives of the gas industry met at the American Gas Association Laboratory, in Cleveland, Ohio, recently to take part in ceremonies which marked the lifting of the debt upon that institution, whose cornerstone was laid two years ago. Burning of a $15,000 mortgage removed the last indebtedness on the laboratory. This event took place in the courtyard of the Cleveland Building. Surrounded by association officials and the laboratory staff, B. J. Mullaney, president of the association touched the mortgage to a natural gas flame and it was quickly consumed amid the enthusiastic applause of more than 50 witnesses.

The ceremonies were brief and were presided over by R. M. Conner, director of the laboratory. Those who spoke besides Mr. Mullaney included C. T. Henderson, of Cleveland, who represented R. W. Gallagher, of Cleveland, chairman of the managing committee of the laboratory, and president of the East Ohio Gas Co.; Alexander Forward of New York, managing director of the association, and A. H. Hall, vice president of the Central Union Gas Co. of New York, and a member of the managing committee in the early years of the institution.

For the purpose of testing and certifying gas appliances, the idea of the laboratory was conceived, and in a small way it began to function August 1, 1925, in quarters on the property of the No. 2 plant of the East Ohio Gas Co. at Cleveland. Rapidly increasing demands upon the limited space called for more room and carefully planned facilities and it soon became apparent that the association should have its own structure.

Within the brief space of five years it has expanded its work, its usefulness and its prestige until it is officially recognized everywhere, and it is now difficult to sell a domestic gas appliance that does not bear the laboratory's seal of approval.

B. J. Mullaney, right, is shown burning a $15,000 mortgage, the last indebtedness on the A.G.A. Testing Laboratory, Cleveland, Ohio. Those watching this event, from left to right, are: A. H. Hall, vice president, Central Union Gas Co., New York, N. Y.; C. T. Henderson, East Ohio Gas Co.; R. M. Conner, director of the laboratory; and Alexander Forward, managing director of the American Gas Association.

SASKATCHEWAN GAS PROJECTS

CHATHAM, Ontario, Aug. 16.—Projects to pipe natural gas to various cities of Saskatchewan are being developed. Representatives of Regina, Moose Jaw and Saskatoon held a conference recently at Regina to discuss joint action in the granting of franchises for all three cities. Following a preliminary discussion, a further conference was held with representatives of the provincial government, when it was decided that the latter should request the services of Dr. G. S. Hume of the Geological Survey of Canada with a view to locating possible gas structures within the province of Saskatchewan. In the meantime projects for utilization of Alberta gas are also being discussed.

GAS FOR HARDING, MONTANA

CASPER, Wyo., Aug. 16.—Harding, Mont., is now assured a natural gas supply as the latest well completed by the Big Horn Oil & Development Co., near that city has a production of 165,000 feet daily and this with the other wells in the field will furnish enough gas for Harding for years. Fifteen wells have been drilled with an average flow of 100,000 feet daily.

NEW OFFICES OPENED

CHATHAM, Ontario, Aug. 16.—Northwestern Utilities, Ltd., of Edmonton, Alberta, has moved to new offices at Jasper Avenue and One Hundred Fourth Street. The new building provides not only office space but storage and show rooms. The company now has approximately 9,700 customers in Edmonton.

COAST COUNTIES GAS

LOS ANGELES, Calif., Aug. 16.—The Coast Counties Gas & Electric Co., a subsidiary of the Pacific Public Service Co., will be distributing natural gas in Contra Costa, Santa Clara, San Benito, and Santa Cruz Counties in a few days. The change from manufactured to natural gas affects 52 communities.

GAS HANDBOOK PREPARED BY AMERICAN METER CO.

"Measurement by Displacement Meters," published by the American Meter Co., New York, is in reality a handbook for the gas industry. Its 206 pages are full of useful and carefully edited material whose character is indicated by the section headings: "Measurement of Gas," "Physical Properties of Gases," "The Tinned Steel Case Meter," "The Metric Iron Case Meter," "Measurement of Gases at High Pressure and Vacuum," "The Meter Prover," "Testing Meters," "Pierce Critical Flow Provers," "Meter Maintenance and the Four Cardinal Points," "Repair of Tinned Steel Case Meters," and "Repair of Iron Case Meters."

"The compilation represents a co-operative effort," say the publishers. "It is indebted to the writings of gas measurement engineers throughout the country and to the careful collaboration of the executive personnel of American Meter Co., under the editorial head of John C. Diehl, author of the Natural Gas Handbook and chief engineer of the company."

MO-KAN OPERATIONS

Missouri-Kansas Pipe Line Co., through its subsidiary companies, the Texas Interstate Pipe Line Co. and the Missouri-Kansas Gas Co., is drilling 8 wells in Stevens and Morton Counties in the Hugoton Field in Southwestern Kansas. This development is a joint operation with the Stevens County Oil & Gas Co. and the Southwestern Kansas Oil & Gas Co. The gas from this area will be available for the Missouri-Kansas Pipe Line Co.'s main line system, which is being extended eastward to Missouri, Illinois and Indiana points. A recently completed well of the company in Morton County, Kansas, is reported with an open flow of 8,000,000 feet. In addition to the Kansas development program the company is conducting six operations in the Texas Panhandle, where seven wells have been completed with a reported combined open flow volume of 180,000,000 feet.

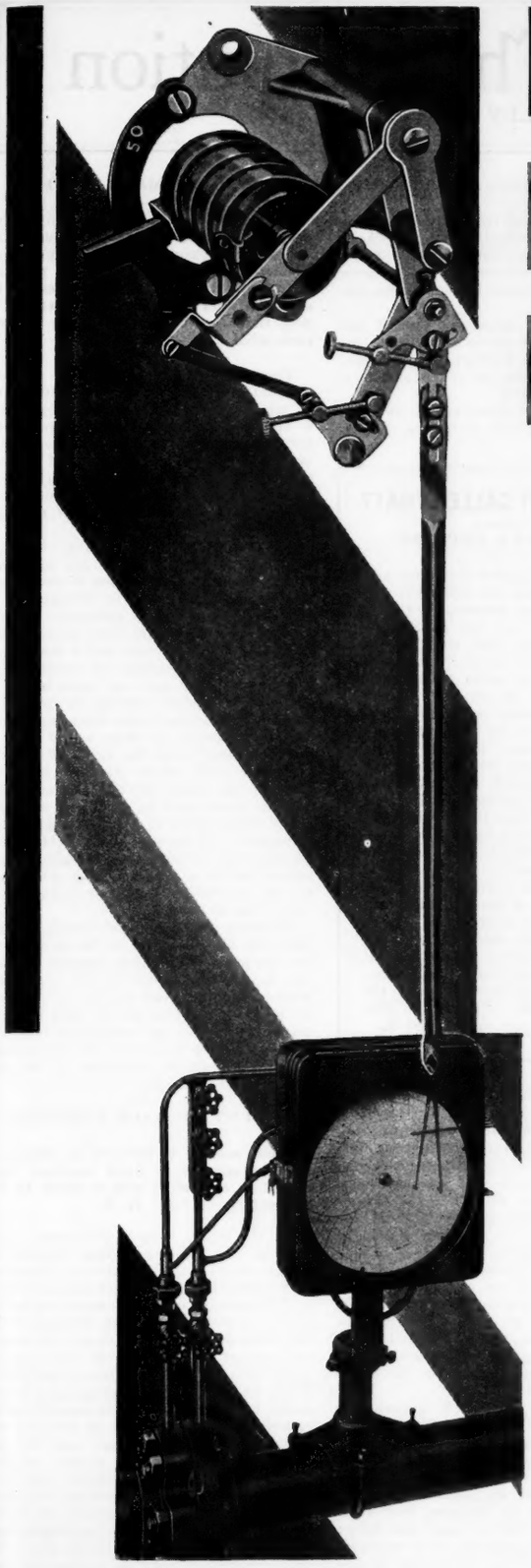
WASHINGTON STATE EXTENSION

SEATTLE, Wash., Aug. 16.—The Northwestern Natural Gas Co. is extending the gas line from the Rattlesnake Hills gas field of Benton County to the city of Kennewick. It is reported the line will be laid across the river over the highway bridge and that Pasco will be serviced as soon as Kennewick piping is completed. It is expected gas will be delivered to both cities by October 1.

The Northwestern Natural Gas Co., a Wichita, Kans., and Washington corporation, is taking the production from nine gas wells producing in the Rattlesnake Hills area and is now serving it to the towns of Prosper, Sunnyside, Mabton and Grandview. A main pipe line of 40 miles has been constructed with 41 miles of feeder line. Three wells are being drilled for the company by the Walla Walla Oil & Gas Co., which controls most of the acreage. Plans of the company call for an extension to Yakima.

INSPECT GAS FIELDS

CHATHAM, Ontario, Aug. 16.—Representatives of the Saskatchewan cities of Moose Jaw and Swift Current recently visited Calgary in connection with the application of the Dominion Gas & Electric Corp. for franchises in Saskatchewan. As guests of the Canadian Western Natural Gas Co. and allied companies they inspected the workings of the Calgary system and later visited the Turner Valley Field.



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EMCO METERS AND REGULATORS

Field Problems and Their Solution

EDITED BY THOMAS F. SMILEY

In order that men connected with the drilling, producing and transporting branches of the petroleum industry may procure quickly a solution of many problems confronting them from time to time in their work, The Oil and Gas Journal has arranged with leading engineers and other recognized authorities to answer questions submitted by readers of this publication pertaining to the work of drilling and producing crude oil and transporting this product.

Everyone is invited to submit questions freely. These questions will be submitted to proper authorities by Mr. Smiley, who edits the page, and answers, based on the best available information, will be published. Each question should give as much detail as possible, especially where it relates to matters where depths of sands, types of sands and operations on adjoining properties would have a bearing on the problem involved. The source of all questions only initials will be published in con-only initials will be published in connection with the question.

In this connection, The Oil and Gas Journal will be glad to publish articles from field men who have devised new methods or practices which are improvements.

In case an immediate answer is important, one will be given by mail if the writer requests it.

ARE THE HOLES STRAIGHTER?

For two or three years I have been reading in The Oil and Gas Journal and elsewhere about crooked holes. The writers tell all about the ruinous effects of these crooked holes and I have read many articles that offered suggestions as to how to prevent crooked holes or at least make them less likely. But after all the talk and writing are there any fewer crooked holes being drilled today than there were three years ago? What progress, if any, has really been made in this matter?—R. O. R.

In considering this question two things should be kept in mind, the mechanical equipment with which rotary holes are drilled and the manner in which this mechanical equipment is used.

Drilling of wells for oil and gas has been a gradual development from very light, primitive equipment to heavy, modern machinery and as the driller has demanded more power and strength in his machinery the manufacturer has given it to him.

There was a great demand for speed in development of leases and orders were sent out to the driller to "make hole" and as his job depended upon the showing he made each tour he "stepped on it" and used all power available with the result that holes were corkscrewed down to the producing formation regardless of future producing requirements.

When such wells were put on the pump and had tubing run in them it was found that whatever might have been gained in early production was paid for in cost of lifting later due to unusual wear in tubing and to rods.

Operators began to insist upon the holes being drilled straight. This was made the first requisite, with speed secondary. Into the drilling contract there was written a clause permitting the production company to send an engineer to any drilling well at any time after giving the drilling contractor reasonable notice of its intention, and this engineer was permitted to "survey" the well. The contract further provided that if the hole deviated over 5 degrees from the vertical at any point the contractor would have to plug it and redrill at his own expense.

This completely changed the type of instructions given to the driller by his contractor. No longer being required to make hole at the highest possible rate of speed regardless of the condition of the hole, the driller exercised caution and to the surprise of most contractors it was found that they were actually able to make more money drilling under controlled conditions than they were able to make when everything was run wide open.

This is witnessed in the change of conditions in Oklahoma City Pool where wells are drilled to about 6,500 feet with the average decline from vertical less than 3 per cent total, whereas in Seminole where little regard was paid to the straightness of the hole, about one well in six was lost. So far as records show, no well has actually been lost owing to crookedness in the Oklahoma City Field, where over 725 wells have been completed or are now being drilled.

With the profit on five wells going into the redrilling of every sixth well in Seminole, the contractor was likely to make no money, and in many instances he "went broke." With wells completed in Oklahoma City in good shape the contractor collects his pay and his margin of profit depends upon his ability as a business man to handle work of this kind for he is not required to pay out part of his earnings to correct mistakes made by undue haste in drilling.

The subject therefore reduces itself to a matter of using equipment that is available in a correct manner, rather than using such heavy equipment without regard to the character of the hole drilled. It is true that the drillers have learned much by their experience in drilling in Oklahoma, but as crooked holes were common to all fields at one time the actual drilling experience of rotary drillers in Oklahoma formations had little bearing upon the final results. When the executive did not insist on speed, regardless of all else, excessively crooked holes became infrequent.

PRACTICAL WORK IN GEOLOGY

Is it not possible for a man without technical training as a geologist to explore a district and form an intelligent opinion as to the likelihood of oil being present? Of course he could not use these new geophysical instruments such as the torsion balance and the magnetor, but if there are surface indications, and there seem to be quite a number of these, why can't any man who is observant recognize these as well as a man who had taken a college course? If it would not be too much trouble I wish you would tell some of the indications of oil that are looked for when the geologist is just exploring the surface.—T. T. S.

Without minimizing the value of technical training as a geologist it may be said that you are right in your belief that much of the exploratory work in searching for regions favorable for the deposition of oil can be done, and often has been done, by men who never had classroom instruction. The surface indications of oil are treated in language easily understood, by Dorsey Hager in his volume, "Practical Oil Geology." He says:

"In searching for petroleum fields, bear in mind the following points:

"1. Oil occurs in sedimentary rocks of marine, estuarine and deltaic origin, i.e., beds formed along sea shores, in inland bays, and at river mouths.

"2. Igneous rocks do not contain oil. Several exceptions to this rule may be cited, but, wherever investigated, the oil was found in conjunction with sedimentaries.

"3. Oil is associated with some form of a folded or arched structure. (Anticlines, monoclines, terraces, and domes are favorable structures for the accumulation of oil. Synclines in some cases contain oil.)

"4. Petroleum seepages, burned out shales, oil stained sands and shales, gas burns, natural gas bubbles on water, and asphalt or brea beds are all indicators of petroliferous regions.

"By bearing the above points in mind, one can enter a new field and quickly determine whether or not it is favorable for oil.

"One first concentrates attention on the sedimentary strata. If igneous formations are known, eliminate such regions from consideration except where volcanic necks or plugs lift the formations to form favorable structures for the accumulation of oil, as occur in Mexico and probably Texas.

"If possible, determine whether or not the oil formations are of marine, estuarine, or deltaic origin. Recent lake beds and marshes do not carry oil enough to form commercial deposits. Sandstones, sands, shales, and coarse dolomitic limestones should be sought as favorable reservoirs for oil.

"Next look for conditions favorable to the accumulation of oil. Such structures are generally folded or faulted with sufficient inclination to the strata to allow oil to rise above the water and accumulate at the top of the structures.

"Oil signs such as seepages, brea beds, and 'gas shows' may or may not occur in a region that contains oil in commercial quantities. If the oil-bearing formations are thickly covered with alluvium or other nonproductive beds, oil may not appear at the surface though the underlying structure may be favorable to the accumulation of oil. One may, however, find oil in springs, or staining the small streams that cut through oil sands. Oil stained rocks and 'gas shows' are favorable signs.

"Light gravity oils do not form heavy asphalt beds, as the constituents are readily washed away by water.

"The best places to look for evidences of oil are in the beds of gullies and canons, and on the steep erosion-scarps or cliffs that occur in many regions."

WHY WAS IT CALLED THAT?

POMEROY'S EXPRESS

Some wag applied the name and it stuck. Back in 1864 the Oil Creek Railroad, starting at Corry, Pa., had built as far as Shaffer Farm, but from that point to Oil City, 12 miles downstream, the traveler had to make his way as best he could. In 60 days Shaffer Farm had grown from one house and barn to an oil town of 3,000. Congestion was terrific. There were no stages, no carriages for hire and horseback riding was impracticable. Walking seemed about the only way of getting to Oil City. But a loud voice bawled, "Packet boat for Oil City! This way for the packet boat!"

Investigation revealed a grease-smeared scow without engine, sail, awning or even a chair. It floated down Oil Creek, guided by oarsmen at prow and stern, at the breath-taking speed of 3 miles an hour—four hours for the trip, and the fare was $3.50. "Pomeroy's Express" was what they called it.

WOULD PROMOTE A WELL

Will you be kind enough to advise me whether there are any books published which cover the subject of oil promotion in new fields? Can you tell me of any that would be of benefit to one who desires to promote a well in a new field but has not had any experience with oil?—A. B. C. D.

This department is unable to suggest the sort of book that you evidently have in mind. The petroleum industry today is highly organized and even if you were fortunate enough to strike a well and open a new pool the problem of disposing of the production from such a pool involves many details which could hardly be anticipated in advance of development.

At this time those actively engaged in the petroleum industry are more inclined to curtail the drilling of new areas for oil than they are to recommend it for there is a shut-in potential production of over 2,000,000 bbls. of oil daily that cannot at this time find a market.

With all this surplus oil available to the buyers they are not especially interested in wildcat acreage or wells located at a distance from their pipe lines and such factors as these would have a direct bearing upon the value of a well.

If you will follow the oil industry through the pages of The Oil and Gas Journal from week to week and note the effort being made by operators, pipe line companies and buyers in all fields so to regulate their business as to reduce overproduction to a minimum you will come to the conclusion that this industry is not a bed of roses.

Knowing nothing of the details of the plan you have in mind or the location of the proposed well little specific advice can be given you but we do urge that before spending good money to promote an oil company you secure good geological advice as to the possibilities of securing oil, also that you look far enough ahead to determine where the oil and gas can be sold if found.

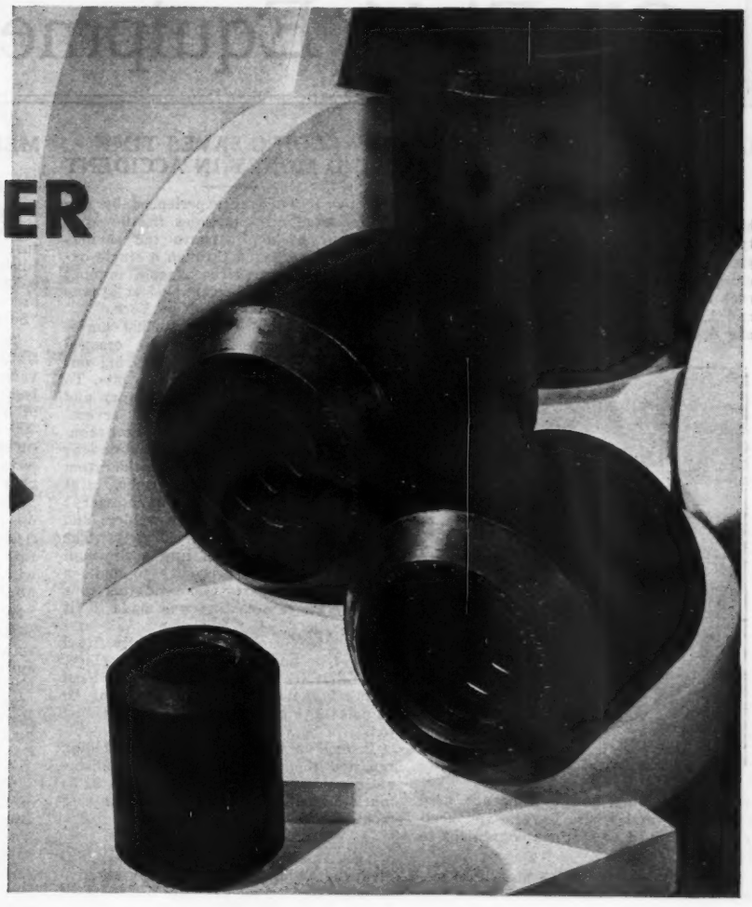
AMOUNT OF BACK PRESSURE

What method is followed in determining the amount of back pressure that should be held on a well in order to get the best results?—S. D. T.

H. C. Miller, senior petroleum engineer of the United States Bureau of Mines, says on this subject in "Function of Natural Gas in the Production of Oil":

"The amount of back pressure to maintain on a well can only be determined by balancing one set of factors, mainly physical, against another, largely economic, in order to obtain the optimum condition. If the back pressure which is used is too great, the gas-oil ratio will sometimes be increased greatly because of the low velocity of the fluid column and the increased slippage and by-passing of the gas. Too high a back pressure may also be uneconomic in its resulting low rate of recovery of the oil, particularly if the well is closely offset and the neighboring well is being operated at a lower pressure. Production data on a large number of flowing wells indicate that all flowing wells should be produced under pressure control based on actual field tests made on the individual wells as soon as they are completed. Such tests, together with a knowledge of the formation (rock) pressure, permeability of the producing formation, nature of the oil produced, relative volumes of gas to oil and the nature of their association in the sand originally, and the consideration of existing economic conditions will determine the best method of pressure control with which to effect the most efficient and economic utilization of gas in the production of oil."

BIGGER & BETTER



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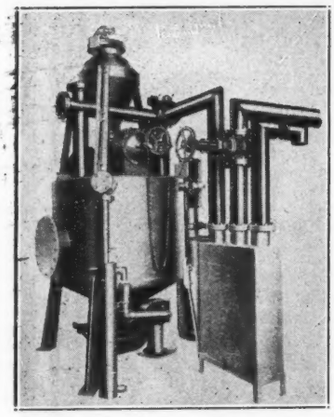
Oil Field Equipment and Supplies

OXWELD PRESENTS TWO ACETYLENE GENERATORS

The Oxweld Acetylene Co., New York, has placed on the market two improved types of nonautomatic stationary acetylene generators for supplying large volumes of acetylene. These generators are each made in two sizes having 500-pound and 1,000-pound carbide capacity. They are designed for large industrial plants



where oxwelding and cutting are used extensively and where oxygen and acetylene are piped to stations convenient to operators.

The Oxweld Type NA-3 acetylene generator, shown in the illustration, is for plants using low-pressure welding and cutting apparatus and delivers to a storage holder which is weighted to supply acetylene to the shop piping system at a pressure of 20-inch water column.

In operation, the carbide is conveyed from the hopper to the generating chamber by a rotary feed screw driven by a slow speed reciprocating water motor. The screw, being cast nickel, is very resistant to wear and will not cause sparks. From the generator the gas enters the wash box, where it passes through a water seal which acts as a scrubber to remove any particles of residue which might have been carried over. This device has the advantage that it cannot clog and cause abnormal back pressure or insufficient delivery to the holder. It thus insures a constant generating pressure.

TRADE LITERATURE RECEIVED

Vertical four-cycle air-injection Diesel engines are the subject of a 44-page illustrated bulletin issued by the Worthington Pump & Machinery Corp., Harrison, N. J.

An attractive new catalog containing the latest data and specifications concerning Robinson orifice fittings is announced by the Robinson Orifice Fitting Co., of Los Angeles, Calif.

Bullard Davis, Inc. (Delaware), subsidiary of Davis Emergency Equipment Co., Inc., New York City, has completed a catalog of gas protection equipment which is ready for distribution.

How to string the wire line from traveling block to crown block, how to assemble the crown block on the top of the derrick, and much other information are embodied in two bulletins just released by the Regan Forge & Engineering Co., of San Pedro, Calif. The bulletins feature type A and B crown blocks and show various types of hook-ups.

OXWELDING SAVES TIME AND MONEY IN ACCIDENT

A recent accident experienced by one of the large oil companies in the Mid-Continent Field illustrates the savings that can be effected through a single oxwelded repair, says the August number of Oxy-Acetylene Tips, published by the Linde Air Products Co., New York.

The connecting rod of a 300 horsepower oil engine broke and crashed through the cast iron base, tearing out a section which was smashed to bits. To obtain a new base from the factory and install it would have required several months and would have cost several thousands of dollars for the 20-ton casting itself, without taking into consideration lost time and delayed operations. But this delay and expense was unnecessary; a call brought the company welders and the repair was begun immediately. The base had been smashed into such small pieces that it was necessary to make a pattern of the parts and send this to a foundry where a casting was made to fit the hole.

The repair casting was carefully fitted in the hole and tack-welded in 10 places to hold it in position. Then after local preheating, the weld was made using 80 pounds of high strength bronze welding rod.

Instead of months of delay, oxwelding repaired the base in 15 hours, and the entire job cost less than one-tenth as much as replacement of the entire base would have cost.

The American Rolling Mill Co., Middletown, Ohio, has issued an attractive 40-page booklet on "Better Welds With Armco Ingot Iron."

MERCO NORDSTROM PUTS VALVES TO RIGID TEST

The Merco Nordstrom Valve Co. is on production with the manufacture of Venturi series lubricated valves which are subjected to hydraulic tests ranging to 6,000 pounds. These high-pressure valves are made of cast steel and embody the "Sealdport" principle of lubrication.

The Venturi valves range in pressure tests from 150 pounds up. The 150-pound valves are subjected to a primary air test of 75 pounds, a secondary air test of 150 pounds and a hydraulic test of 300 pounds. All of the valves manufactured under the Nordstrom name are subjected to tests that are twice their rated capacity.

An engineer for the Nordstrom Company states that the hydraulic test is intended to prove valve resistance to rupture primarily and is made on valves with both ends blanked off and with the plug in cracked position.

Where the hydraulic test required exceeds 500 pounds the valve is tested with water pressure on both sides of the plug and in closed position. The hydrostatic pressures, according to the Nordstrom company, are double the rated cold working pressures in practically all of these lubricated valves.

The P. H. & F. M. Roots Co., division of the Stacey Engineering Co., Connersville, Ind., has issued two new four-page bulletins on low-pressure and high-pressure roller bearing blowers. Bulletin No. 22-B2 covers the low-pressure blower, and Bulletin No. 23-B2 the high-pressure units.

THREE BULLETINS COVER USE OF DIFFERENT PROTECTIVE COATINGS

By L. G. E. Bignell
Petroleum Engineering Editor

For several years the petroleum industry has been intensely interested in protective coatings for equipment used in its various branches and innumerable compounds and processes have been offered with varying degrees of success attained in actual use.

The basic problems are well known to the technicians and engineers of the industry and chemists and metallurgists for manufacturers have made an intensive study of those conditions and offered suggections and materials for retarding corrosion.

In this connection, three recently issued bulletins prepared by Headley Emulsified Products Co., Franklin Trust Building, Philadelphia, Pa., are of interest. The author of these bulletins shows a thorough knowledge of his subject and gives logical recommendations for corrective measures to be used to overcome the effects of corrosion.

Bulletin 230, second edition, covers the use of emulsified asphalts prepared from specially selected asphalt base material with a small amount of soap emulsifier that can be applied cold and has high resistance to destruction by freezing and forms a good bond to wet or moist surfaces with freedom from appreciable sedimentation and nonreversibility after setting up. The bulletin sets forth suggested places for application and gives detailed and explicit instructions as to the best method of preparing the surface to receive the coating as well as the recommended method of application.

Bulletin 330 also deals with Headley Emulsified Asphalt as it is prepared for waterproofing, damproofing and general protective coating and describes in considerable detail the properties of emulsified asphalts.

Bulletin 430 covers the company's asphalt-base aluminum coating that should have many places of application in the petroleum industry. This coating is made from a carefully balanced mixture of pure refined Mexican asphalt and aluminum flakes to which is added only enough volatile solvent to produce a good brushing or spraying consistency.

The protective qualities of aluminum bronzing powder and Mexican asphalt but the method of handling this subject are too well known to the engineers of the petroleum industry to need repeating, that has been followed in Bulletin 430 adds some new data to the literature.

Experience has shown that blending of desirable materials into satisfactory compounds to resist corrosion depends largely upon the personal knowledge and experience of the chemists in charge of the manufacturer's laboratory, and in this particular Headley Emulsified Products Co. is fortunate in having as president and technical director Edgar S. Ross, who was for five years supervisor of the roofing research laboratory of the Mellon Institute of Industrial Research, Pittsburgh, Pa. While serving the Mellon Institute in this capacity, Mr. Ross had an exceptional opportunity to make an intensive and extensive study of asphalts and other materials to determine their basic qualities as waterproofing and protective coating materials, as well as exceptional laboratory facilities to do technical research work as a basis for manufacturing processes to prepare these raw materials for commercial uses.

MEN KNOWN *in* THE EQUIPMENT FIELD

F. L. Kallum, who recently joined the staff of the Foster Wheeler Corp., is attached to the Los Angeles office as chief engineer of the gasoline absorption and stabilizer departments. He previously

F. L. Kallum

was connected with C. F. Braun & Co., Shell Oil Co., Pan American Petroleum Co., Southwestern Engineering Corp. and other organizations. He has written many technical articles on the subject of natural gasoline manufacture and practice and the theory of heat exchange.

Mr. Kallum received an A.B. degree at Stanford in 1921 and a Mechanical Engineering degree in 1922. His article on "Thermal Conductivity of Liquids" while in Stanford won him membership in the Sigma Xi honorary society in 1922, and the same paper won the A.S.M.E. junior prize in 1923. Mr. Kallum is an active member of the American Chemical Society, the American Institute of Chemical Engineers, the American Society of Mechanical Engineers, the American Petroleum Institute and the California Natural Gasoline Association.

TEXROPE DRIVE OFFERS LOW MAINTENANCE COST

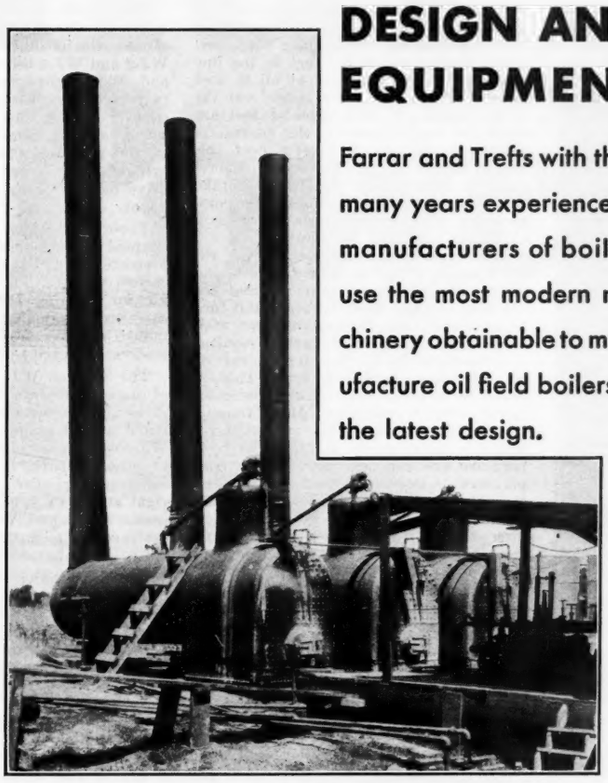
The Texrope drive, originated by the Allis-Chalmers Manufacturing Co., Milwaukee, Wis., and said by the company to have revolutionized transmission practice, consists of a driving and a driven sheave, grooved for V-shaped endless Texrope belts of rubberized cord fabric. Power is transmitted with no slippage, the manufacturer says, by the wedging contact of the belts in the V-shaped grooves. The result is a short-center drive with a reported efficiency of 98.9 per cent, requiring practically no maintenance and infrequent adjustment.

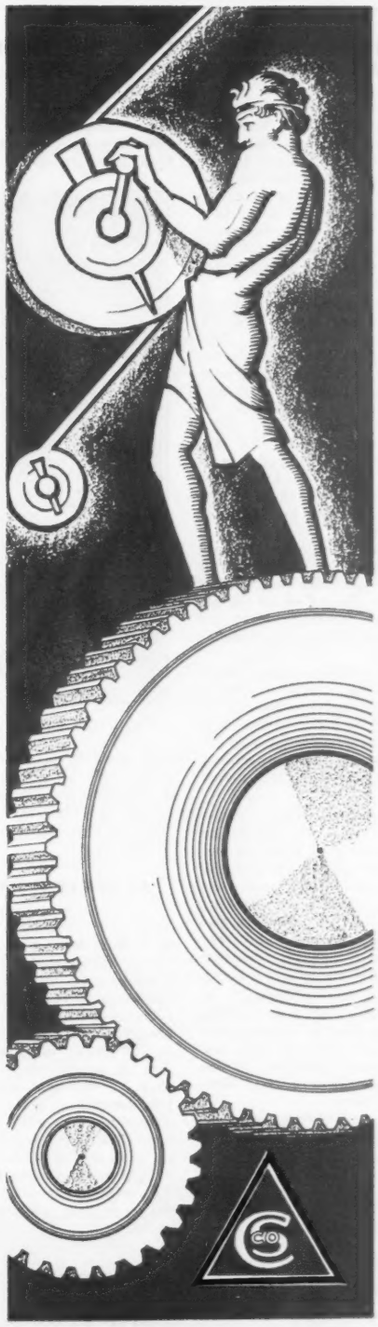
Continuous operation virtually is assured. If one or two belts wear out after long service, the remaining belts carry the load until the replacement is convenient. With Texrope it is said to be possible to use a higher speed motor, with a consequent saving in cost. Where moisture or dirt is unavoidable Texrope drives are said to operate with no loss in efficiency. Requiring no lubrication, the maintenance cost is low.

ADVANCED • • •

DESIGN AND EQUIPMENT

Farrar and Trefts with their many years experience as manufacturers of boilers use the most modern machinery obtainable to manufacture oil field boilers of the latest design.





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Oil Field Equipment and Supplies

NEW FEATURES EMBODIED IN AMERICAN SEPARATOR

In developing the improved American separator, announced by the American Tank & Equipment Co. of Oklahoma City, a manufacturing subsidiary in the Black, Sivalls & Bryson organization, the engineering staff worked for nearly two years in designing and testing its various features. In fact, a separator was built with glass windows, making it possible to watch the operations, as it functioned in the various field tests.

While there are many improvements, the outstanding feature is the B.S.&B. spray condenser and inside float. This inside float is said to have greatly increased capacity. The B.S.&B. spray condenser strips the oil from the gas, and when the gas leaves the separator no particles of oil are in it.

Another important feature is the tangential inlets whereby the crude comes into the separator at an angle, so the force is not retarded nor are there elbows to become worn out soon by intensive pressure and sediment.

Neither inlets nor any other fittings project beyond the shell of this separator so as to interfere with its rolling and free handling on the ground or on trucks. The inlets are low down, close to the ground, making for ease in connecting up piping.

These separators may be equipped with a sand hopper, making it easy to remove any accumulated sediment, especially in fields where sand is so much in evidence. No separate heater is required and all are equipped with steam coil connections, which may be furnished by the manufacturers.

The shell is made of half-inch flange steel, with welded joints. The heads are one-eighth inch thicker than recommended by the American Society of Mechanical Engineers' boiler code. The flanges are made of cast steel. The separators are made in large size for low pressure and small size for high pressure, and they can be adjusted to suit varying pressures.

The improved American, in size 5 by 15, 40 pounds pressure has a capacity of 10,000,000 feet of gas; 65 pounds pressure, 25,000,000 feet, and 95 pounds pressure 30,000,000 feet. Many of the separators are in actual operation in the Oklahoma City Field, Hobbs, New Mexico and Okotoks, Alberta.

BUSINESS NOTES

The Fluor Corp., Ltd., of Los Angeles, Calif., manufacturer of Fluor redwood cooling towers, have opened a new district office in Kansas City, Mo., with Guy T. Martin in charge.

Dick Clark, vice president and sales manager of the Baash-Ross Tool Co., Los Angeles, Calif., and Edwin Burns, assistant general manager, left for a two weeks' business trip to include the larger oil fields in Oklahoma and New Mexico.

The next regular meeting of the Steel Founders' Society of America, Inc., will be held in the William Penn Hotel, Pittsburgh, Pa., Wednesday and Thursday, September 10 and 11.

The Quigley Furnace Specialties Co., New York, announces a change of name to Quigley Co., Inc., owing to the rapid and broad development of its products during the last few years.

The Gulf Coast district offices of Le Bus Rotary Tool Co., Mills Iron Works and the Garrott Brass & Machine Co., all represented by Paul Reid, have been moved from the Second National Bank Building, Houston, Tex., to Suite 915, Merchants and Manufacturers Building, that city.

LYLE BRUSH JOINS THE KEROTEST SALES STAFF

Lyle L. Brush, who recently joined the sales organization of the Kerotest Manufacturing Co., Pittsburgh, Pa., maker of high pressure steel valves and fittings,

Lyle L. Brush

will cover West Texas and New Mexico fields. Mr. Brush was formerly with the J. H. McEvoy Co., Houston, Tex., and before that he was with the Lago Petroleum Co., Maracaibo, Venezuela, for several years.

AUTOMATIC RATIO CONTROL

A ratio control for the mixing of gases or liquids in any desired proportion has been announced by Bailey Meter Co. of Cleveland, Ohio. This control finds many applications in oil refineries and process industries where mixtures of fluids must be definitely proportioned in a given ratio to secure the best results. Air and fuel for combustion in industrial furnaces may be automatically proportioned by this control so as to gain maximum fuel economy. A control of this kind can be applied to both liquid and gaseous fuels or to a combination of the two in such a way as to insure the highest combustion efficiency consistent with economical operation. Mixing of two or more gases or liquids to form a low cost fuel can also be accomplished by this control.

CONTROL DEVICE FIRES STILLS AUTOMATICALLY

The de Florez temperature control for automatic firing of oil stills, manufactured by the M. W. Kellogg Co., New York, handles all of the fuel in the line it is set to govern. If gas or oil is used alone, the balanced valve meters out the entire supply. If both types of fuel are employed simultaneously, the control is applied to the one of greater heat volume. There is no "by-pass" effect. Therefore the control is always ready to take prompt and positive action for the suppression of any tendencies towards a change in oil outlet temperature.

The importance of supplying the exact amount of fuel to raise the incoming oil to just the temperature desired for cracking is recognized. To get a unit into balance and then to keep it there with the least amount of fuel juggling requires a temperature-measuring instrument of an inherently balancing type. This is found in a Leeds & Northrup potentiometer prometer movement. Many times a minute this instrument automatically makes a measurement of oil outlet temperature and compares it with the temperature desired—as set on a dial—then through a stabilized air-pressure system, the balanced fuel valve is moved in a direction and by an amount just sufficient to counteract the tendency to change. As the fuel valve, having no stuffing box, is practically frictionless, response is immediate.

Besides increasing the realization of valuable products from each barrel of oil, de Florez automatic control, by preventing wide fluctuations in the fire box, reduces oxidation of metal parts and CO_2 conditions are held within reasonable bounds.

A bulletin recently issued by the manufacturing company describes the device in detail.

FLUOR AWARDED CONTRACT

The Fluor Corp., Ltd., Los Angeles, Calif., manufacture of Fluor redwood cooling towers and contractor for compression and absorption plants and all types of heavy construction, have been awarded the contract to build a series of compressor stations on the new natural gas line extending from the Texas Panhandle to Indianapolis, Ind. The job is for the Missouri-Kansas Pipe Line Co. and involves approximately $1,500,000 worth of work.

The Larkin Packer Co. of St. Louis, Mo., has moved its Tulsa office from East First Street to Room 209 Tulsa Trust Building. C. F. Dougherty is in charge.

SHOWS HOW A TRACTOR SIMPLIFIES OIL FIELD JOBS

Caterpillar Thirty, owned by Loffland Brothers, oil field contractors, equipped with a B. & A. winch, rigging up a rotary rig in the Oklahoma City Field.

SULLIVAN ADDS TO ITS LINE OF COMPRESSORS

The Sullivan Machinery Co., New York and Chicago, has announced as additions to its line of compressors the WJ-2 and WJ-4 belt-drive and the WJ-22 and WJ-44 direct motor-drive vertical two-stage compressors, providing capacities of 55, 80, 110 and 160 cubic feet per minute and terminal pressures as high as 400 pounds. They are built in two-cylinder and four-cylinder models for drive by belt or by direct connection to motor.

These machines are particularly adapted to such duties as charging high pressure storage tanks with air or non-corrosive gases, for example, to supply air for starting Diesel engines and to concentrate valuable by-product gases in industrial processes where a machine of moderate capacity is desired.

The Sullivan WJ-2 compressor consists of one low pressure cylinder and one high pressure cylinder, cast en bloc, and is fitted with a pulley for belt drive. The WJ-4 compressor is a belt-driven machine of larger capacity and consists of two, two-stage cylinder blocks, mounted at right angles (V type) on a special crankcase. WJ-2 and WJ-4 compressors are designed for mounting directly on a concrete or timber foundation without the use of a subbase.

The intercooler is of the independent vertical type. It consists of a tank containing water-cooling tubes, around which the air is circulated to remove the heat generated in the first stage of compression, before the air is admitted to the high pressure cylinder. The intercooler shell is built to withstand 100 pounds pressure, which provides a liberal factor of safety for any conditions.

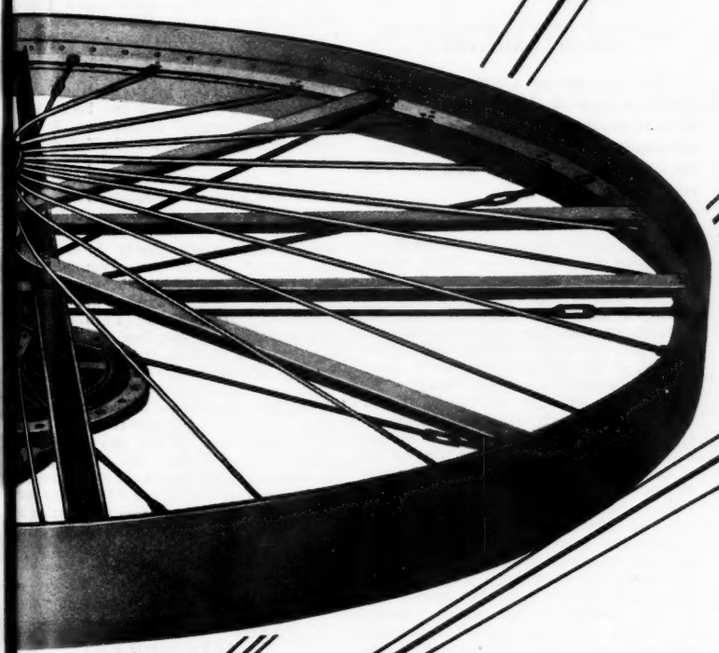
WJ-22 and WJ-44 types are similar to the units just described, but are direct motor driven by means of an interlocking flexible coupling. In these units the motor and compressor are mounted on a sub-base. The WJ-22, two-cylinder unit, employs the same compressor as the WJ-2 belt-driven type. The WJ-44 is the motor-driven equivalent of the WJ-4 belt-driven compressor outfit.

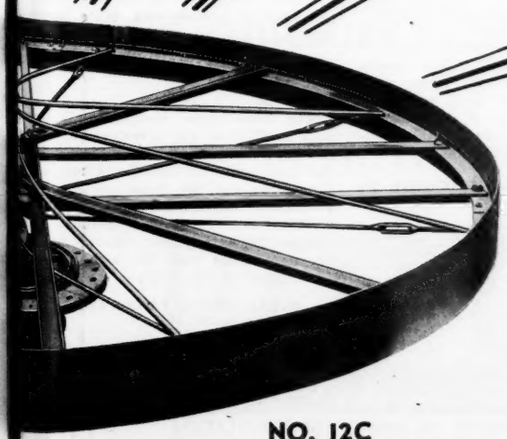
TAUBMAN OPENS TWO BRANCHES

Herman Taubman, president of the Taubman Supply Corp., Tulsa, announces the opening of a new branch in Hobbs, N. M. and one in Hugoton, Kans., center of the western Kansas gas field. This is in line with the Taubman policy of establishing a branch in important oil and gas centers to make 24-hour service available. The organization is completing its tenth year of continuous service in the oil and gas industry. From one small location in Tulsa it has grown to be an important factor in the Mid-Continent Field, with branches in Oklahoma City, Seminole and Konawa, Okla.; Borger and Wink, Tex.; Wichita, McPherson and Hugoton, Kans., and Hobbs, N. M. The company distributes tubular products, Pittsburgh "Seamless" and Central Tube "Lapweld," and is factory representative of the Chapman Valve Manufacturing Co. and the Stockham Pipe & Fittings Co. The Taubman corporation also maintains a used pipe department. Mr. Taubman states that the business of the corporation shows a gain of 15 per cent over the same period of last year.

Champion & Barber, Inc., of Los Angeles, Calif., manufacturers of rotary hose, screen pipe, pressure gauge protectors, Nikeladium steel goosenecks, and Nikeladium rotary hose connections and parts, have appointed the Bettis Sales Co., Houston, Tex., as Gulf Coast distributor for Champion & Barber products.

onal Powers





NO. 12C

NO. 6 GEARED

PPLY COMPANIES

Technical Questions Answered

BY CHARLES K. FRANCIS, PH.D., TECHNICAL EDITOR

This department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with the marketing and utilization of petroleum products.

Questions should be submitted in as much detail as possible so as to assure a satisfactory answer.

All inquiries should be signed and if other than the given initials are to be used please indicate the desired letters.

Questions involving patented processes, intricate formulas and calculations and estimates of costs, for obvious reasons, cannot be answered. The replies will appear on this page within a reasonable time.

MANUFACTURING AIR-BLOWN AND STEAM-REFINED ASPHALT

I would like to know where I can get information concerning commercial methods of manufacturing air-blown and steam distilled asphalts. Up to the present time the only information that I have been able to get comes from Abraham's book, "Asphalt and Allied Substances." Any information you can give me on this subject will be very much appreciated.—G. R. H.

"Asphalt and Allied Substances," by Abraham, is considered a reliable source of information about asphalt. The third edition has recently (1929) appeared. There are numerous references to the literature at the end of each chapter. There was an article on asphalt refining in The Oil and Gas Journal, August 16, 1928, page 150. "Asphalts—Their Origin, Manufacture and Uses" was published in The Refiner and Natural Gasoline Manufacturer, August, 1928, page 81. "Methods in Refining Roofing Asphalts" may be found in The Oil and Gas Journal, March 7, 1929, page 113. See also the special section on asphalt by R. G. Smith in Day's "Handbook of the Petroleum Industry," Vol. 1, page 787.

The methods for the manufacture of asphalt from suitable petroleum are based on similar principles that must be observed for the reduction of lubricating stocks to a specified viscosity or some other selected property. Petroleum residues must be freed from the undesirable lighter products so that the final residue will be an asphalt that contains neither uncombined carbon nor particles of coke. The lighter products, consisting of oils, wax, etc., are removed by the process of distillation and the conditions of this operation are the features that must be controlled when making a good asphalt.

There are three forms of distillation used for reducing an asphalt stock; these are distillation in the presence of steam, distillation with the aid of air, and a combination of steam and air during the distillation. With a growing tendency for a more extensive use of vacuum distillation when making lubricating oils, it is possible that some asphalt will be made as a by-product.

Quoting R. G. Smith, above reference: "The largest amount of asphalt is made by the steam-refined process. The lighter portions of the crude oil are distilled by heat until the residue reaches the required consistency, being agitated all the time by steam. . . . The action of the steam is based on the physical law that the total vapor pressure is equal to the sum of the vapor pressures of the components of two immiscible liquids, and that when distillation takes place the vapors will pass over in the ratio of their respective vapor pressures, the boiling points of the mixtures being the temperature at which the sum of the vapor pressures of the two liquids is equal to the presence of the atmosphere. Owing to this fact, the distillation takes place at a materially lower boiling point than if steam were not used, the asphalt is freed from undesirable compounds and the formation of free carbon or coke is prevented. This process gives a ductile asphalt with highly cementitious qualities."

ALCOHOL GASOLINE MIXTURE IN FRANCE

I am told that mixtures of alcohol and gasoline are sold in France and would like to know, if possible for you to give it to me, to what extent alcohol is used as a motor fuel in France?—W. B. W.

The addition of alcohol is authorized, in fact required, by the French government, but the law is not enforced because no large quantity of cheap alcohol has been available. The motor fuel produced by the addition of alcohol to gasoline that is imported is known as carburant national. The purpose of the law is to absorb what was thought to be large excess stocks of alcohol; however, only comparatively small quantities of alcohol have been used. During the past year not more than 1.5 per cent of alcohol has been available for making the blend.

A recent announcement states that a large quantity of wine was made in 1929, a large part of which has not been sold. The government has decided to take over this surplus wine and extract the alcohol, which will then be available for making the carburant national. It has been estimated that there will be enough alcohol from this source to about double the quantity used the previous year.

The difficulty encountered with this proposed use of alcohol has been that the market price of the alcohol has remained above the selling price of gasoline, consequently there is a loss to be absorbed and this has been done by passing it on to the consumer. This is opposite from what was expected of such a law. When the law requiring the addition of 10 per cent alcohol was proposed it was suggested that the use of alcohol in this way would tend to lower the price of the motor fuel to the public.

TANK CAR OUTAGES

During the past years I have read quite a few articles in The Oil and Gas Journal pertaining to the procedure in checking tank car outages as well as figuring the temperature adjustments to determine the net gallonage. If you have these articles indexed so that they may be readily located, I will appreciate it if you will send me the pages from your magazine containing articles on the above subject.—D. B.

It is seldom possible to supply back numbers of The Oil and Gas Journal because each issue is exhausted soon after publication. A number of articles have been printed dealing with outages. An article on Measuring and Calculating Outages, by John Stumpf, was published on April 21, 1927, page 86. Outage Losses of Natural Gasoline was discussed by Emby Kaye, May 29, 1930, page 131. Additional information on this subject may be found on the Technical Questions Answered page for the issues October 28, 1926; January 20, 1927, under Coefficient of Expansion. The issues of February 9, 1928; June 28, 1928; March 28, 1928, under Tank Car Outage.

The Interstate Commerce Commission, Washington, D. C., publishes Regulations for the Transportation of Explosives, etc., and on page 64 will be found directions for calculating outages with a chart on page 65. Boyd's Tank Car Circular No. 6-A, Interstate Commerce Commission No. A-2023, contains a list of all tank cars, by companies, operated in the United States and Canada. From this list it is possible to locate the car number, together with its rated shipping capacity.

PROGRESS OF PETROLEUM REFINING INDUSTRY

Could you give me a table showing the yearly progress of the refining industry? If it is possible for you to give me such information I want to know the number of refineries, together with the total cost?—F. C. R.

The American Petroleum Institute has published in the volume, Petroleum Facts and Figures, 2d. Edition, 1929, under the section on Refineries and Refining in the United States, page 135, some statistics indicating the progress of petroleum refining. The data following are from this source and the United States Bureau of Mines reports for each year.

"The modern petroleum industry began in 1859, when Drake drilled the first oil well in Pennsylvania. People commonly say Drake 'discovered' petroleum, but in fact, he merely discovered how to get it cheaply and in quantities, by boring. Before Drake's time, kerosene had been refined; kerosene lamps had been invented, and fortunes had been made from it. But the kerosene of those days was distilled from coal or shales or from the skimmings of oil springs. There were a half dozen refineries in Pittsburgh, and a half hundred in the country, before the Drake well was drilled. Pittsburgh seriously considered lighting its streets with kerosene 30 years before the Drake well was drilled. Drake merely brought enlargement of the supply, and set men finding means to utilize it."

There were 78 oil refineries reported in 1859, according to the United States Census Bureau. Although these were small plants, compared with what we have today, there was a considerable sum invested and the value of the products was in excess of $6,398,000.

PETROLEUM REFINING INDUSTRY IN THE UNITED STATES

Year	Plants	Employees	Value of Products
1859	78	1,473	$6,398,000
1869	170	1,870	26,942,000
1879	86	9,869	43,705,000
1889	94	11,403	85,001,000
1899	67	12,199	123,929,000
1909	147	13,929	236,998,000
1914	176	25,366	396,361,000
1919	320	58,889	1,632,533,000
1927	354	71,234	2,133,923,000

We have no reliable information showing the total cost of the refineries.

There was a very rapid growth of refineries in the early days of the industry, as shown by the fact that there were 170 refineries reported for the year 1869. Many of these plants were quite small and had been built without adequate knowledge of the principles involved or commercial experience. Some of these refineries were soon dismantled and it was not until 1914 that the total number again reached that of 1869.

There were 463 refineries in the United States on January 1, 1929, with a total charging capacity of 3,719,550 bbls. January 1, 1930, there were 479 refineries with a daily charging capacity of 3,972,460 bbls. Detailed information showing the location and type, etc., of the petroleum refineries in the United States may be found in The Oil and Gas Journal, March 6, 1930.

WATER WHITE COLOR

Would it be possible for you to give me the scientific basis or what might be called equivalent for water white color as applied to petroleum products? What I want to know does this standard of color mean that the gasoline or oil must match pure water in color or some kind of solution?—E. D. S.

In usual terms, as used in the petroleum industry in the United States, the equivalent to what is known as water white gasoline and kerosene is the depth of color which will match +21 Saybolt. The term has been in use in the industry for many years and has been interpretated by several authorities. It has been defined in Technical Methods of Chemical Analysis, Lunge, Vol 3, Pt. 1, page 27, as the equivalent of a column 404.6 m.m long of a solution in water of 0.00027 per cent acidulated potassium chromate. A potassium bichromate solution appears more closely to duplicate the tint of refined petroleum products than the solution of the chromate. When standardizing the Stammer and Hellige colorimeter, Ubberholde, Petroleum 10, 725, 1915, used a solution of 0.06 grams of potassium bichromate in one liter of water as the standard color.

An investigation by Francis, Bennett and Espy, Petroleum Magazine, March, 1921, page 32, indicated that the water white disk used in the Saybolt instrument was equivalent to a column 20 inches long, (508 m.m.), of an acidulated water solution containing 0.0002 per cent potassium bichromate. The acidulation in this work was on the basis of a 1 per cent solution of sulphuric acid. The 21 Saybolt color was found to be 5.6 m.g.m. of potassium bichromate per liter.

TAXES ON GASOLINE AND AUTOMOBILES

Taxes are collected on gasoline, the purchase of automobiles, state registration, etc. Can you show how much this amounts to per year for the entire country?—J. B. D.

The total taxes, including all forms, paid in 1928 by the petroleum and automobile industries, according to data of the National Automobile Chamber of Commerce and the American Petroleum Institute, amounted to approximately $808,000,000. This total includes registration fees, gasoline taxes, personal property taxes paid by both industries as outlined in the table.

TOTAL MOTOR TAXES FOR 1928

Federal excise tax of 3 per cent on cars and buses (repealed May 29, 1928)		$20,386,176
State registration fees	$322,630,025	
Gasoline tax	304,871,766	
		627,501,791
Municipal		20,000,000
Personal property tax		140,000,000
Total		$807,887,967

The gasoline tax ranges in the different states and District of Columbia from 2 cents to 6 cents a gallon. The tax is collected for the state by the marketing departments of the oil companies. In some states there is an additional tax on lubricating oil.

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Personal Paragraphs About Oil Men

Emil Opferkuck, Superior Engine Company, Springfield, Ohio, made a recent visit to Tulsa.

* * *

L. S. Allen, Tulsa representative of the Naylor Pipe Company, has left for a month's vacation visit in Canada.

* * *

R. M. McMahon, Bovaird Supply Company, Tulsa, went to Borger, Tex., and Hobbs, N. M., on company business.

* * *

J. L. Shakeley, vice president Frick-Reid Supply Corporation, Tulsa, left with his family for a visit to Pennsylvania.

* * *

C. A. Richardson of the Allis-Chalmers Manufacturing Company, Milwaukee, Wis., is on a trip through the Southwest.

* * *

Harry Leyendecker in the scouting department of the Tidal Oil Company, Fort Worth, Tex., is spending a two weeks' vacation in Galveston.

* * *

W. R. Vance and Richard Byers, geologists for the Gulf Production Company in Midland, Tex., are spending their vacations in San Antonio and Galveston, Tex.

* * *

P. J. McIntyre, vice president of Phillips Petroleum Company, Bartlesville, Okla., has been visiting the company's West Texas and New Mexico office in San Angelo, Tex.

* * *

N. C. Byars, formerly purchasing agent for the C. F. Camp Company, Tulsa, has accepted a sales position with the Republic Supply Company and left for Hobbs, N. M., to assume his duties.

* * *

Arlington Nuetzel, treasurer of Blackman-Hill & Company, St. Louis, Mo., was in Tulsa looking over the field with the possibility of putting in a stock of machine tools which his company manufactures.

* * *

M. C. Elworthy of the Magneto Ignition Corporation left on a business trip to Dallas, Houston and San Antonio, Tex. His mission on this trip will be devoted mostly to aviation interests in the Southwest.

* * *

P. M. Buttermore in the geological department of the Transcontinental Oil Company, Fort Worth, Tex., and Mrs. Buttermore, are spending their vacation in Oklahoma, most of the time in Oklahoma City.

* * *

Harry Pennington and family are spending a vacation in Mexico. Their home is in San Antonio. Mr. Pennington is consulting engineer for major oil interests, and has written extensively on engineering problems.

* * *

Pete Pollard and Tom Jameson of the firm of Jameson & Pollard and R. Brooks of Coleman, Tex., were injured near that place when a truck overturned with them near the Humble gasoline station on the Coleman-Santa Anna highway.

* * *

E. M. Lindsay, engineer and superintendent of the Florida Power Corporation, has become associated with the Standard Management & Operating Corporation of San Francisco. He will have charge of the supervision of all construction work on the various gas plants and distribution systems being installed by that company as well as being supervising engineer of electric construction.

* * *

Wesley G. Gish, chief geologist of the Sinclair Oil & Gas Company, with offices at Tulsa, has been made a vice president and director of the company. He has been with the company about five years, coming to the concern as chief geologist. Two years ago he was transferred to Fort Worth where he was in charge of the land department of the Texas offices of the company. He was brought back to Tulsa the first of this year.

E. R. Filley, division manager of The Texas Company for Oklahoma, Kansas and Kentucky, with headquarters in Tulsa, is spending several weeks in Minnesota.

* * *

H. J. Lockhart and family of Parkersburg, W. Va., are in Europe for the summer. Mr. Lockhart is vice president and general manager of the Parkersburg Rig & Reel Company.

* * *

A. E. Oldham has resigned from the Rycade Oil Company to be chief geologist of the Louisiana Oil & Refining Company, Shreveport, La. Mr. Oldham has spent several years in Louisiana and Texas fields.

* * *

Mr. and Mrs. William H. McFadden of New Orleans, La., have sailed from New York for a European tour of several months. McFadden was formerly senior vice president of the Marland Oil Company.

* * *

George Berry of the land department of the Sinclair Oil & Gas Company, Fort Worth, Tex., is spending his two weeks' vacation at Fort Sill, Okla., in training. George has a reserve captaincy in the infantry.

Men in the Industry

E. C. Deal

E. C. Deal, recently made president of the Oklahoma Natural Gas Corporation, Tulsa, has had a broad experience with public service and utility organizations in New York, Georgia, Kansas, Missouri, North Carolina, Texas, Kentucky and many other states. Also he served as vice president and general manager of the Compania Cubana de Elictricidad, a foreign branch of the Electric Bond & Share Company. In New York, from which city he went to Tulsa, he was president of the Peoples Light & Power Company.

Mr. Deal was born in Georgia and much of his life has been passed in the South and the Southwest. In the Spanish-American War he was engaged in electrical construction work for the United States Government in Key West. During the World War he served as an engineer in increasing the production of coal in the Colorado and New Mexico fields. He is a director in several utility corporations.

Election of Mr. Deal to the presidency of the Oklahoma Natural Gas Corporation followed the elevation of Thomas R. Weymouth, his predecessor, to the chairmanship of the board of directors.

A. J. Broderick of the firm of Broderick & Calvert, Fort Worth, Tex., is passing a vacation in Europe.

* * *

George N. Moore of the Cosden Oil Company, Fort Worth, Tex., is spending a week or 10 days in Chicago on business.

* * *

H. J. Allen, Norris Brothers, Inc., Robinson, Ill., manufacturers of oil field equipment, called on oil company buyers in Tulsa.

* * *

B. O. Hammond, representative of the Parkersburg Rig & Reel Company, is spending a two weeks' vacation with relatives in New Orleans, La.

* * *

W. G. Ray of the W. G. Ray Drilling Company of Shreveport, La., has moved to San Antonio and is operating in the Pettus district in Bee County.

* * *

George C. Moon, sales manager of the Hazard Wire Rope Company, New York, spent several days in the Fort Worth, Tex., office during the past week.

* * *

W. S. Farish, president of the Humble Oil & Refining Company, Houston, Tex., has been in New York on business, completing the round trip in a week.

* * *

Harry R. Dean, purchasing agent of the Devonian Oil Company, and his family have gone to a Minnesota summer resort where they will spend a month.

* * *

T. K. Duckwall, field auditor for the Parkersburg Rig & Reel Company, spent his vacation in Tulsa and Fort Worth. He returned to Hobbs, N. M., this week.

* * *

J. H. Van Zant, chief geologist with the Easton Oil Company, Enid, Okla., has returned from a field trip spent in West Texas and the Hobbs area, New Mexico.

* * *

N. R. Patterson of the Patterson Steel Company, Tulsa, motored to Eagle River, Wis., where he will spend a few weeks in fishing, motor boating and other diversions.

* * *

E. R. Estin, scout for the Gulf Production Company in San Antonio, Tex., is back to work after being off on a vacation. He spent most of the time in Northwest Texas and New Mexico at Carlsbad with a few days in Corpus Christi, Tex.

* * *

A. B. Patterson, president of the Patterson Steel Company, has returned from a vacation trip with his family on the West Coast region of California. Mr. Patterson did some deep sea fishing.

* * *

F. I. Brinegar, Continental Supply Company, St. Louis, was in Tulsa recently. Frank formerly was connected with the Tulsa stores and office and is well known among both buyers and supply men.

* * *

C. C. Hoffman, who has been district geologist of the Empire Gas & Fuel Company, Fort Worth, Tex., has been transferred to Bartlesville, Okla., and promoted to the position of chief geologist of the Cities Service Gas Company.

* * *

Dr. H. P. Bybee of San Angelo, Tex., geologist and mineralogist for the Board for the Lease of University Lands, left Austin last week for Bloomington, Ind. He will be accompanied home by Mrs. Bybee and children, who have been spending the summer there.

* * *

Col. T. H. Barton, president of the Lion Oil Refining Company has been spending much time in San Antonio, Tex., and looking after the field work personally in Victoria County where the first wildcat test drilled by his company in Southwest Texas was completed as a gas well. The second test is now being drilled.

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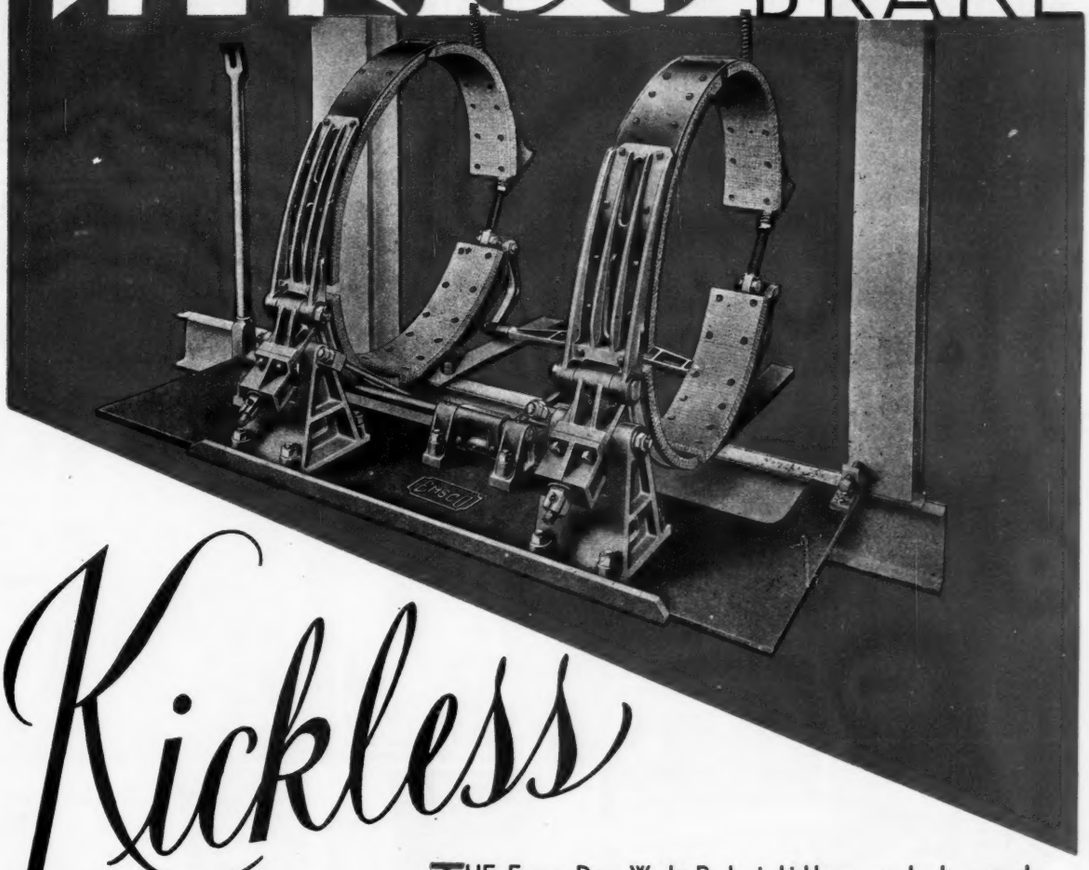

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Caught by The Journal's Cameras in Different Areas

1—T. L. Moore, Mid-Continent representative; Don B. Moore, general superintendent, and J. F. Dickson, chief engineer, Kewanee Boiler Co. 2—D. D. Christner, district geologist, Continental Oil Co., Fort Worth, Tex., and R. D. Cannon, consulting geologist, Continental Oil Co., San Angelo, Tex. 3—Crew Kings Mill gasoline plant, Forest E. Gilmore Co., Gray County, Texas: W. W. Wilkes, construction superintendent; K. W. Bunch, plant superintendent; J. P. Johnson, chief engineer; J. W. Richards, repairman; R. E. Gibson, stillman; and J. McFarland, fireman. 4—M. B. Sweeney, general agent, Sun Oil Co., Dallas, and his son, G. E. Sweeney, production superintendent, Sun Oil Co., Big Spring, Tex. 5—Superintendents and field agents, Simms Oil Co. Left to right: C. S. Fisher, J. W. Gammage, C. F. Brooks, James L. Wright, W. H. Harrison, Jr., B. J. Johnson, John A. Pearl, J. B. Holloway, F. F. Herzog, G. P. Brown, H. A. Rike, C. H. Campbell, R. B. McGuire, L. E. Frensley, I. M. Avent, J. L. Fairley, E. H. Lee, I. E. Hood, B. A. Cunningham, and R. R. Forster. 6—J. W. Lohr, operator gasoline recovery plant, Continental Oil Co., Baltimore, Md. 7—C. T. Oglesby, H. C. Hunter, and E. K. Anderson, Skelgas plant, Liman, Okla. 8—T. A. Newton, district foreman of production, Twin State Oil Co., Yale, Okla., and W. J. Flood, factory representative, Franklin Valveless Engine Co. in the Mid-Continent. 9—Jack Kittner, refinery superintendent, Stoll Oil Refining Co. plant, Louisville, Ky. 10—S. F. Williamson, assistant manager of purchases; J. D. Rush, assistant to manager of purchases; and R. M. Ketchum, manager of purchases, General Petroleum Corp. of California.

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The

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Refine your distillates with liquid Sulfur Dioxide and avoid

Inferior finished products

Treating losses

Acid sludge production

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New York City

CRACKING PROCESS FOR SMALL REFINERY

(Continued from Page 46)

radiant and fluid heat applied to the oil.

No flue gas recirculation is used on this furnace, the roof tubes cooling the products of combustion before they come in contact with the surfaces of the tubes behind the bridge wall. Because of the small excess of air used for combustion, the rather small size of the furnace and the value of the fuel used to fire the furnace, no air preheater or forced draft fan are used.

The furnace operates under mild conditions for the desired throughput and has an overcapacity of approximately 20 per cent. Since combustion is practically completed in the combustion chamber of the oven, a clear atmosphere is maintained in the furnace almost immediately after the burners are lighted. This facilitates the observation of the condition of the tubes in the furnace for which purpose numerous peep holes are provided through the walls.

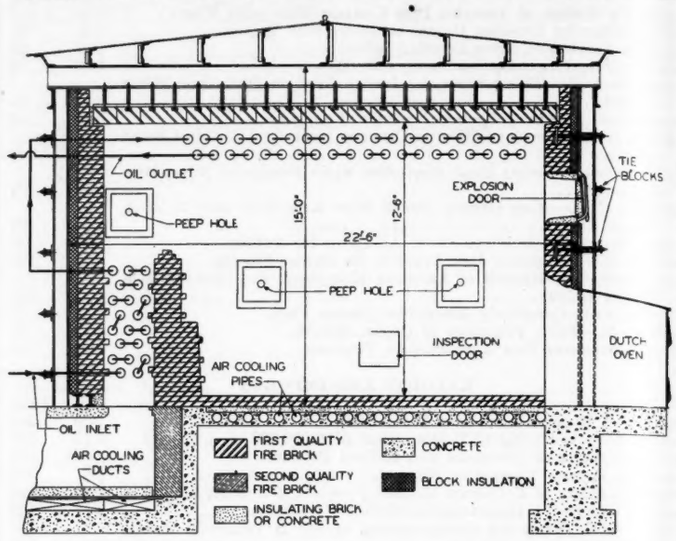

Chart showing design of furnace for cracking operation.

ALLEGHENY-ARROW OIL CO., CANTON, OHIO. DUBBS CRACKING UNIT NO. 1
SUMMARY OF OPERATION

On stream—from (time) 3 p. m., date April 27, 1930, to (time) 3 a. m., date May 7, 1930
Hours on stream.... 228
Hours cleaning 24
Hours cycle 252
% time on stream 90.47
Charging stock .....7,689 ..... A.P.I.° 28.1
Intake ..... % Fed Direct

No. and size tubes 61—4"
Size of Re.Chbr. 5x25x1½
Blend ..... x ..... % x

RESULTS OF CRACKING:	Total bbls.	Bbls. day	% Chg. stock	A.P.I.°	% solids	Visc.
Press. Dist.; Fl. Press. Dist.	4,558	480	59.28	56.5		
Residuum (Fl.)	2,683	282	34.89	11.9	.4	197-Furol 122°
Coke, Gas and Loss	448	47	5.83			
Totals	7,689	809	100			

COKE (Outage—Feet):	
Tons	0.5
Lbs.-bbl. Chg. Stk.	.130

RESULTS DISTILLING PD: (Lab.)	Total bbls.	Bbls. day	% Chg. stock	% P.D.	A.P.I.°
Gasoline (410 Cut)	3,396	357	44.17	74.50	59.7
P.D. Bottoms Engler	1,048	110	13.63	23.00	
Loss	114			2.50	
Total	4,558			100	

TEMPERATURES:	
Furnace-Radiant	1,294
Above tubes	1,407
Below tubes	1,182
Transfer	894
Vapors to deph.	855
Vapors to cond.	511
C. F.	769
Hot Feed	334

P.D. RECIRCULATION	
P.D. Recir. G-hr.	836 by meter
P.D. Prod. G-hr.	76.1
% Recirc./P.D. Prod.	217 pounds
Re.Chbr. Press.	321 pounds
H.O.P. Disc.	720
H.O.P.-R.P.H.	

REMARKS:
Initial on charging stock 450, 30% over at 572.
Pressure distillate contained 83% at 437 Engler making a yield of 49.6 gasoline.

REASON FOR SHUTDOWN:
Plant inspection and cleanout.
Unit in excellent condition, no coke in vapor line or top of chamber.
Deph.—3'6"x28'x1"
16-side by side pans.
R.O. fed on 9th pan from bottom.

NEW TEXAS GAS LINES

United Gas Corp. is starting to build an additional gas line in Southwest Texas. The line from San Antonio to Pettus will be extended to Refugio, and another line will be built from Pettus west to the Magnolia line which is now a part of the United Gas Corp. system. The Magnolia line runs from the Laredo district to a point just east of San Antonio. Connecting of the system feeding San Antonio with that feeding Houston from Refugio gives the company a network of pipe lines so that the load can be shifted from one field to another if necessary. Considerable gas production has been developed in the Pettus area just northeast of the oil production, in fact the discovery well of the field was a gas well.

G. F. WYVELL DIES

George F. Wyvell, 72, pioneer oil man of Pennsylvania and Oklahoma, died at his home in Okmulgee, Okla., last week of heart trouble. Wyvell, formerly of Claremore, came to this territory before statehood. Varied experiences in the oil fields of New York, his native state, Pennsylvania, West Virginia, Kansas and Ohio followed the opening of the Bradford Field, where he began his career. In the early days Wyvell was associated with the late Clint Moore of Tulsa.

E. D. BARRY DIES

Edward D. Barry, aged 54, Bradford, Pa., oil producer, is dead at his home there after a year's illness. He had been a resident of Bradford 43 years.

SOUTHWEST TEXAS FIELDS

(Continued from Page 57)

line, Survey 172, rigged up. South Texas Producing Co.'s No. 3 Dinn, 660 feet to north line, 660 feet east line, Survey 143, total depth 500 feet, drilling.

Schoolfield-Obyrne Pool—Duval County

C. E. Long's (Shell) No. 1 Bishop Duval Land Co., Survey 59, total depth 450 feet, shut down. Magnolia Petroleum Co.'s No. 1 Lundell, 450 feet north line, 150 feet east line, southeast, Survey 60, total depth 5,838 feet, fishing for drill stem. Same company's No. 1 Hahl-Norton, 885 feet west line, 600 feet south line, Survey 61, total depth 550 feet, drilling.

Randado Pool—Jim Hogg County

Cole Petroleum Co.'s No. 1 Wood, 802 feet west line, 547 feet southwest line, Block 16, Survey 82, location.

Schoot Pool—Webb County

George S. Marshall's No. 2 Garcia, 1,170 feet north line, 2,490 feet east line, Survey 458, total depth 600 feet, drilling.

Carolina-Texas Pool—Webb County

Magnolia Petroleum Co.'s No. 1 Jones-Wright, 330 feet south line, 330 feet west line, Survey 674, total depth 2,365 feet, drilling. Washington Texas Oil & Gas Co.'s No. 1 R. O. Barnsley, 325 feet south line, 768 feet east line, Block 16, Survey 268, total depth 1,600 feet, drilling.

Cole Field—Webb County

O. W. Killam's No. 19 Bruni, Adams Subdivision, Mariano Arispe grant, Block 1, Survey 8, rigging up. South Texas Producing Co.'s (Humble) No. 3 S. Benavides, 150 feet northeast line, 150 feet northwest line, Block 429, Myrtle E. Hale Subdivision, Mariano Arispe grant, total depth 250 feet, drilling. Trussel, Cezeaux & Partee's No. 1 Bruni, 150 feet northeast line, 300 feet southeast line, Block 35, Adams Subdivision, Survey 10, Mariano Arispe grant, total depth 600 feet, drilling.

Pappas Pool—Zapata County

John Pappas Pool, Inc.'s No. 1 Flores, 2,977 feet southeast line, 6,000 feet Rio Grande River, Porcion 35, rigging up.

Charco Redondo Pool—Zapata County

C. R. Moore & J. W. Moore's No. 1 Adela G. de Flores, 330 feet northwest line, 330 feet northeast line, E. M. Doty Oil & Gas Subdivision, Block 99, Charco Redondo grant, total depth 150 feet. Same parties' No. 2 Adela G. de Flores, 150 feet northeast line, 150 feet southeast line, E. M. Doty Oil & Gas Subdivision, Block 151, Charco Redondo grant, total depth 50 feet, standing. Mid-West Public Utilities' No. 1 Garcia, 450 feet southwest line, 450 feet southeast line, M. P. de Garza tract, Block 33, Pedernal grant, total depth 1,381 feet, standing.

Jennings-Muckleroy Pool—Zapata County

Alamo Drilling & Leasing Co.'s (Claggett) No. 4 Trevino, 490 feet east line, 150 feet south line, Block 1, Survey 66, total depth 300 feet, drilling. Same company's No. 5 Trevino, 150 feet south line, 150 feet east line, Block 1, Survey 66, location. Same company's No. 6 Trevino, 450 feet south line, 150 feet east line, Block 1, Survey 66, location. Allied Gas Co.'s No. 9-A I. G. Trevino, 450 feet southeast line, 150 feet east line, Block 6, Survey 65, total depth 1,238 feet. Same company's No. 16-A Trevino, 150 feet northwest line, 1,650 feet southwest line, Block 6, Survey 65, location. Same company's No. 3-B Trevino, 150 feet to northwest line, 150 feet east line, Block 15, Survey 65, location. Same company's No. 4-B Trevino, 150 feet east line, 350 feet northwest line, Block 15, Survey 65, location. Same company's No. 5-B Trevino, 260 feet east line, 485 feet northwest line, Block 15, Survey 65, location. Same company's No. 6-B Trevino, 150 feet east line, 775 feet northwest line, Block 15, location. Same company's No. 7-B Trevino, 980 feet northwest line, 150 feet east line, Block 15, Survey 65, total depth 1,281 feet. Same company's No. 8-B Trevino, 520 feet to northwest line, 465 feet east line, Block 20, Survey 5, location. Edgington & Niles' No. 5-B Trevino, 150 feet southeast line, 1,050 feet southwest line, Block 4, Survey 65, location. Gatlen & Matthews' No. 1 Garza, Block 18, Survey 413, derrick. Keen & Jackson's No. 1 M. Garza, 150 feet northwest line, 150 feet southwest line, Block 59, Zorro Ranch Subdivision, Comitas grant, rigging up. Nordan & Morris-Grimm & Yakey's No. 1 S. Bustamente, 990 feet northeast line, 150 feet northwest line, Share 34, Fansler partition, Comitas grant, location. Same parties' No. 2 C. Bustamente, 150 feet northeast line, 150 feet southeast line, Fansler partition, Comitas grant, Share 33, location. Same parties' No. 1 M. Trevino, 510 feet north line, 150 feet west line, Block 5, Survey 412, total depth 1,270 feet, coring deeper. W. R. Shankle's No. 5 Trevino, 1,195 feet north of south corner, 150 feet east line, Block 15, Survey 65, location. Skoglung & Maddox's No. 1 Montemayor, 150 feet west line, 450 feet north line, Block 5, Survey 63, rigging up. S. R. C. Oil Co.'s No. 1 F. Cuellar, 150 feet northwest line, 150 feet northeast line, Block 7, Survey 65, derrick. Same company's No. 5-A Trevino, 150 feet south line, 150 feet west line, Block 16, Survey 66, total depth 1,268 feet. Same company's No. 11-B Cuellar, 450 feet southeast line, 150 feet southwest line, Block 7, Survey 65, total depth 1,219 feet, shut down. Whicker, Arnold & Ahler's No. 3 Garza, 150 feet southwest line, 450 feet southeast line, Block 1, Zorro Ranch Subdivision, Comitas grant, location changed.

Jennings-Cuellar—Zapata County

O. W. Killam's No. 1 R. Lopez, Survey 71, total depth 1,771 feet, drilling. Same party's No. 25-B Cuellar, Survey 277, total depth 1,575 feet. Same party's No. 3 Lopez, 460 feet south line, 160 feet west line, Block 12, Survey 75, awaiting repairs. Same party's No. 1 Slator, Block 1, Slator Pasture, Borrego grant, spudded. South Texas Producing Co.'s No. 9 Measles, 3,830 feet southeast line, 660 feet northeast line, C. Blanco grant, total depth 1,756 feet, drilling.

PRORATION OF DARST CREEK

(For Period of July 14 to Oct. 2, 1930, Inc.)

Company and lease—	Total potential	Daily allowance
Abercrombie:		
Thomas Dix	6,534	1,750
Cranfill & Reynolds:		
R. C. Appling	35	9
Empire Gas & Fuel Co:		
A. E. Dowdy	1,391	372
H. Willie	521	140
C. Knoblock	1,382	370
Total	3,294	882
Gulf Production Co.:		
C. Anderson	3,018	808
Thomas Dix	3,417	915
Dix-McKean	3,690	2,329
Dix-McKean "A"	1,445	387
C. Knoblock	990	265
D. C. Malaer	913	245
W. R. Posey	5,750	1,539
A. Tadlock	1,622	434
Total	25,747	6,922
Humble Oil & Ref. Co.:		
D. D. Baker No. 1	5,766	1,544
D. D. Baker No. 2	788	212
D. D. Baker No. 3	1,129	302
A. E. Dowdy	415	113
G. County Strip	901	243
L. G. Denman	16,940	4,538
J. E. Tadlock	30	8
S. Wilson	2,250	605
Y. Wilson	2,642	708
Total	30,861	8,273
Louisiana Oil Ref. Co.:		
Thomas Dix	6,188	1,657
Thomas Dix 20-AC	2,360	633
Dix-McKean	7,266	1,946
P. Roamel	985	264
Total	16,799	4,500
Magnolia Petroleum Co.:		
R. C. Appling	475	127
Thomas Dix	7,766	2,080
M. T. Klein	1,477	396
A. Knodel	3,241	868
R. Miller	662	177
J. M. Richburg	535	143
S. M. Roamel A	562	151
S. M. Roamel B	326	87
Total	15,045	4,029
Penn Oil Co.:		
R. Miller	80	21
Stroube & Stroube:		
R. Miller	110	29
Sun Oil Co.:		
C. Knoblock	12,061	3,231
The Texas Company:		
L. Anderson	2,400	643
A. E. Dowdy	350	94
C. Knoblock	23,013	6,163
R. A. Parish	675	178
W. R. Posey	3,997	1,070
P. Roamel	338	91
A. Schmidt	761	204
H. Willie	5,727	1,534
D. Wilson	7,395	1,980
Y. Wilson	17	5
Total	44,673	11,962
Dr. Thompson:		
W. R. Posey	53	14
Trinity Drillers:		
R. Miller A-B	50	13
R. Miller C-D	1,255	336
R. Miller Kirby	125	33
Total	1,430	382
Field total	156,822	42,004

COMPLETIONS

Dobrowolski Pool—Bexar County

Collins & Edmiston's No. 1 Halberdier, 1,997 feet west line, 150 feet southwest line of 109-acre tract in the J. Perego Survey, total depth 690 feet (corrected depth), pumping 15 bbls. Eckert & Son's No. 7 L. Sandemer, 150 feet from west line, 550 feet from south line of 110-acre tract, Survey 52, total depth 708 feet, 10 bbls.

Darst Creek Pool—Guadalupe County

Empire Gas & Fuel Co.'s No. 5 Dowdy, 792 feet from north line, 150 feet from east line of tract in the J. C. Darst Survey, total depth 2,573 feet, 700 bbls. initial. Gulf Production Co.'s No. A-4 Dix-McKean, 300 feet northeast of No. 2 150 feet northwest of southeast line in the J. R. Robinson Survey, total depth 2,527 feet, pumping and flowing 1,320 bbls. Humble Oil & Refining Co.'s No. 7 D. D. Baker, 30 feet south line, 630 feet east line of 60-acre tract in the J. C. Darst Survey, total depth 2,570 feet, 600 bbls. initial. L. C. Turman's No. 2 State in the J. C. Darst Survey, total depth 2,575 feet, 850 bbls. initial.

Chapman Pool—Williamson County

W. D. Anderson's No. A-5 T. P. Simmons, total depth 1,932 feet, flowing 250 bbls. initial. E. L. Chapman's No. 6 T. P. Simmons, total depth 1,878 feet, flowing 1,500 bbls. initial. C. Link and others' No. 6 Swanson, total depth 2,105 feet, flowing 1,000 bbls. G. Stratton's No. 3 J. C. Abbott, 300 feet west of No. 4 in the S. Miller Survey, total depth 2,198 feet, pumping 200 bbls. Trapshooter Reilly Oil & Royalties Co.'s No. 2 M. V. Lawrence, 166 feet to west line, 130½ feet to north line of tract, total depth 1,475 feet, flowing 200 bbls. per hour.

Pettus Area—Bee County

Humble Oil & Refining Co.'s No. 5 McKinney, 150 feet south of south line of Pettus townsite direct offset to Houston Oil Co.'s No. 1 Beasley in the G. A. Kerr Survey, total depth 3,903 feet, estimated 450 to 500 bbls.

ABANDONED TESTS

Pettus Area—Bee County

S.R.C. Oil Co.'s No. 1 Block 19, townsite center of block, total depth 3,967 feet, hole lost and abandoned, skidding rig for new test.

Agua Dulce Pool—Nueces County

Houston Oil Co. of Texas' No. 1 M. E. Brooks, 330 feet from north and east lines of fractional Section 29, Benton Pasture Subdivision, Los Sauces grant, total depth 5,478 feet, abandoned dry.

Chapman Pool—Williamson County

W. D. Anderson and others' No. 1 S. J. Smith, total depth 2,612 feet, dry and abandoned. Alford and others' No. 1 Kirkendall, total depth 2,000 feet, dry and abandoned.

Darst Creek Pool—Guadalupe County

Luling Oil & Gas Co.'s No. 1 Goldman, 690 feet southwest line, 150 feet northwest line, total depth 2,696 feet, made sulphur water, abandoned.

NEW LOCATIONS

Dobrowolski Pool—Bexar County

Eckert & Son's No. 8 L. Sandemer, 625 feet south line, 1,155 feet west line, Survey No. 52, total depth 318 feet, drilling.

Chapman Pool—Williamson County

W. D. Anderson's No. A-5 T. P. Simmons, total depth 1,932 feet, 250 bbls. W. D. Anderson's No. A-6, T. P. Simmons, location. E. R. Ertel and others' No. 6 J. C. Abbott, total depth 809 feet, standing. McIntyre and others' No. 1 B. Lawrence, location. Trapshooter Reilly Oil & Royalty Co.'s No. 1 M. V. Lawrence, total depth 1,474 feet, set 6⅝-inch casing. Same company's No. 2 M. V. Lawrence, 166 feet west line, 130½ feet north line of tract, total depth 1,475 feet, flowing 200 bbls. Westbrook and others' No. 1 T. P. Simmons, location. Texas Oil & Gas Development Co.'s No. 1 Gernert & Allison, derrick up, moving in machinery.

Pettus Area—Bee County

Grayburg Oil Co.'s No. A-2 Kimball, 1,000 feet north line, 200 feet west line of 189-8-acre tract in the Stephen Winship Survey, spudded in. Dr. Hewitt and others' No. 1 Mrs. Mauldin, 2,400 feet north line, 1,200 feet east line of 200-acre tract in the J. Pointevent Abstract 257, rigging up rotary. Humble Oil & Refining Co.'s No. 6 McKinney, 150 feet direct offset to Houston Oil Co.'s No. 1, Block 35, in the George A. Kerr Survey, spudded in. Humble & Hurlbut and others' No. 1 J. C. Wood, 150 feet northwest line, 1,144 feet southwest line of survey, 350 feet northeast line of 110.3-acre tract in the P. T. Irrigation Co. Survey 431, spudded in. Union Producing Co.'s No. 25 Ray, 1,700 feet south, 1,400 feet east line of survey in the P. Miller Survey, location. Same company's No. 26 Ray, 2,500 feet south line, 2,000 feet east line of survey in the P. Miller Survey, location.

DRILLING ACTIVITY

Lion-McFadden Pool—Victoria County

Houston Oil Co.'s No. 1 McFadden, 330 feet south, 900 feet east of SE cor. of survey, 1¼ miles southwest of Lion Oil Co.'s gasser, 1¾ miles east of The Texas Company's No. 1 McFadden in the L. Mann Survey, ready to spud in. Lion Oil Refining Co.'s No. 2 McFadden, 1,917 feet west of NE cor., 512 feet at right angles from the north line of the C. O. Edwards Survey, 660 feet east of No. 1 in the M. J. Travesia Survey, total depth 4,032 feet, resumed drilling.

Dobrowolski Pool—Bexar County

Bolling & Michael's No. 1 J. P. Adams, 150 feet south line, 300 feet west line of lease in the Miguel Gortaris Survey, total depth 662 feet, preparing to deepen. Penn-Tex Oil Co.'s No. 3 Sandemeyer, 300 feet west of No. 2 in the M. Menchaca Survey, total depth 590 feet, drilling. Swearingen Oil Co.'s No. 5 fee, 30 feet south of No. 4, Survey No. 52, location. Swearingen Oil Co.'s No. 1 J. Halberdin, 1,997 feet west line, 150 feet southwest line of 109-acre tract in the J. Perege No. 52 Survey, total depth 718 feet, setting up storage and making connections. W. R. Swearingen and others' No. 2 Halberdin, 300 feet southeast of No. 1 in the J. Perege No. 57 Survey, total depth 460 feet, drilling in rock. Swearingen Oil Co.'s No. 6 A. J. Swearingen, 150 feet west line, 1,110 feet south line of 100-acre tract, Survey No. 52, location.

Bruner Pool—Caldwell County

Humble Oil & Refining Co.'s No. 6 New, 450 feet south line, 1,650 feet west line in the J. Hinds Survey, location.

Buchanan Pool—Caldwell County

Buchanan-Danciger's No. 2 L. K. Brown, 300 feet north No. 1, C. M. Cannon Survey, total depth 210 feet, drilling.

Darst Creek—Guadalupe County

Abercrombie's No. 9 Dix-McKean, 450 feet southwest line, 150 feet northwest line of 20-acre tract in the J. R. Robinson Survey, total depth 2,306 feet, drilling. Humble Oil & Refining Co.'s No. 8 D. D. Baker, 980 feet west of SE cor. of 60-acre Baker tract, 150 feet south line, offset to A-3 Dowdy, total depth 2,523 feet, set casing. Same company's No. A-2 Dowdy, southwest part of Darst Creek, offset to Empire Gas & Fuel Co.'s No. 5 Dowdy, NE cor. of "A" lease, location. Same company's No. A-3 Dowdy, 180 feet northeast line, 60 feet south of county road on 52-acre lease, total depth 2,514 feet, set casing. Magnolia Petroleum Co.'s No. 4 L. V. Echols, 400 feet west of No. 3 Echols, 150 feet from the lease line, total depth 1,200 feet, drilling in shale. Simms Oil Co.'s No. 4 Manford, location. The Texas Company's No. A-5 Knoblock, location. The Texas Company's No. 8-B C. Knoblock, 1,080 feet from northeast line, 150 feet from southeast line of 75-acre tract in the J. R. Robinson Survey, location. F. L. Thompson's No. 2 W. R. Posey, location. Witherspoon Oil Co.'s No. 1 Baker, 300 feet north of Jarmon's No. 1 Baker on 40-foot strip between Humble's Baker lease on west and The Texas Company's Dallas Wilson lease on east in the Jacob C. Darst Survey. Further operations stopped by injunction, hearing September 1.

Chapman Pool—Williamson County

W. D. Anderson's No. 7 M. V. Lawrence, location. W. D. Anderson's No. 8 M. V. Lawrence, location. Bartlett &

Wilson's No. 1 R. E. Stewart, total depth 741 feet, drilling. Bartlett & Wilson's No. 2 R. E. Stewart, total depth 790 feet, drilling. Fred Beatty's No. 1 J. R. Pumphrey, 1,328 feet south and east lines of Mrs. J. B. Pumphrey 160-acre tract in the W. Cartwright Survey, total depth 1,500 feet, shut down. Big Indian Royalty Pool Co.'s No. 1 A. Rosenberg, total depth 1,150 feet, shut down. E. L. Chapman's No. B-6 J. C. Abbott, derrick. E. L. Chapman's No. 1 F. Fuchs, fishing at 850 feet. E. L. Chapman's No. C-3 J. J. Sides, total depth 2,121 feet, shut down. J. L. Collins & Co.'s No. 5 M. V. Lawrence, 150 feet west line, 515 feet south line, 27-acre tract in the S. Miller Survey, total depth 1,462 feet, in serpentine. J. L. Collins & Co.'s No. 7 M. V. Lawrence, 150 feet east line, 215 feet from south line of 27-acre tract in the S. Miller Survey, location.

E. R. Ertel's No. 1 H. Swanson, spudded in and shut down. Elliott & Moore's No. 1 A. J. Carlson, total depth 40 feet, in shale. A. J. Luke's No. 1 A. Simmons, 500 feet north line, 450 feet west line of 25-acre tract in the H. Owen Survey, location. McNeil's No. 6 Kilgore, total depth 1,550 feet, set 6⅝-inch casing at 1,550 feet, W.O.C. Manning and Anderson's No. 1 Cooper, total depth 1,226 feet, drilling in shale. W. C. Marshall's No. 2 R. A. Krueger, total depth 1,950 feet, drilling in shale. E. R. Marts' No. 4 T. P. Simmons, 150 feet west of center of east line of 17-acre tract in the S. Miller Survey, location. Rheubotham's No. 1 S. H. Jarrell, total depth 40 feet, shut down. Rosenfield's No. 1 Pfluger, total depth 1,234 feet, fishing. M. M. Rowan's No. 1 A. Jackson, total depth 1,900 feet, shut down. Southland Development Co.'s No. 1 T. Lawler, derrick. G. Stratton's No. 2 J. C. Abbott, 300 feet west of No. 3 in the S. Miller Survey, location. G. Stratton's No. 4 J. C. Abbott, 150 feet north line, 450 feet east line of 32-acre tract in the S. Miller Survey, total depth 1,552 feet, set 6⅝-inch casing, W.O.C. G. Stratton's No. 5 J. C. Abbott, 450 feet east line, 150 feet south line of 32-acre tract in the S. Miller Survey, location. Jess Tomberlin's No. 1 C. M. Partman, total depth 1,410 feet, shut down. Wilson and others' No. 1 A. B. Simmons, total depth 1,435 feet, drilling in shale. Wilson and others' No. 1 C. Sitman, total depth 2,875 feet, drilling in lime. R. S. Wilson's No. 1 J. A. Walker, rigging up. J. R. Welder's No. 1 J. C. Abbott, 310 feet north line, 150 feet east line of 10-acre tract in the H. Owen Survey, total depth 2,225 feet, shut down.

Pettus Area—Bee County

Arkansas Fuel Oil Co.'s No. 1 J. Kimball, 200 feet south line, 200 feet to west line of 80-acre tract A. C. Billingsley 249-acre tract in the Stephen Winship Survey, total depth 3,880 feet, temporarily shut down. Batex Petroleum Co.'s No. 2 Burnett, 361 feet to north line, 900 feet to east line of lease in the South John Pace Survey, total depth 2,370 feet, drilling. Cosden Oil Co.'s No. 4 McKinney, 497 feet north of No. 2 on the same lease and 300 feet from east line of lease, total depth 1,530 feet, drilling.

C. R. M. Drilling Co.'s No. 1, Block 34, Townsite, center of Block 34, Pettus Townsite, total depth 1,200 feet, drilling. Getty Oil Co.'s No. 1, Block 40, Townsite, center of Block 40, Pettus Townsite, total depth 3,857 feet, top pay 3,853 feet. Glasscock Brothers' No. 2 Townsite, center of Block 24, Pettus Townsite, total depth 3,879 feet, leaking casing, killing well. Grayburg Oil Co.'s No. 1 S. D. Copeland, 300 feet to east and south line of northeast one-quarter of 320-acre tract, American Sanford Survey, total depth 3,832 feet, sand at 3,792 feet carried salt water. Same company's No. 1-A Kimball, center of 189-acre lease, Stephen Winship Survey, total depth 3,596 feet; abandoned. Same company's No. 2-A Kimball, 1,000 feet to north line, 200 feet to west line of 189-acre tract, Stephen Winship Survey, supdded. Same company's No. 1-B Kimball, 150 feet each way from southwest corner of 80-acre tract, or 2,700 feet to east line, 2,100 feet to south line of Stephen Winship Survey, total depth 4,500 feet, will abandon. Hicks & Young's No. 1 Billingsley, 155 feet from south and west line of tract, B. Q. Hadley Survey, total depth 360 feet; shut down. Houston Oil Co.'s No. 2 Neumann, east offset to Cosden's No. 2 McKinney, George A. Kerr Survey, total depth 2,570 feet, drilling. Same company's No. 1 Townsite, center of Block 21, Pettus Townsite, total depth 1,128 feet, drilling. Same company's No. 1, Block 23 Townsite, center of Block 23, Pettus Townsite, total depth 3,899 feet, top pay 3,890 feet, set casing. Same company's No. 1, Block 33 Townsite, center of Block 33, Pettus Townsite, total depth 3,910 feet, sand 3,902 feet, preparing to set casing. Same company's No. 1, Block 35 Townsite, center of Block 35 Pettus Townsite, total depth 3,894 feet, top pay 3,887 feet, set casing. Lange & Mimms' No. 1 Billingsley, 155 feet to south and west lines of Billingsley 10 acres out of 150-acre tract, J. Poitevant Survey, total depth 560 feet, shut down.

Rio Bravo Oil Co.'s No. 1 S.A.&A.P. Railway, 58 feet north of south line, 120 feet west of west line of Block 3, Pettus Townsite, spudded. Rio Bravo Oil Co.'s No. 3 S.A.&A.P. Railway, George A. Kerr Survey, location. S. R. C. Oil Co.'s No. 1 Block 31 Townsite, center of Block 31 Pettus Townsite, total depth 3,842 feet, topped sand, setting casing. Southerland and others' No. 1 Billingsley, 155 feet to south line, 155 feet to west line of 40 acres, off north end of 150 acres, B. Q. Hadley Survey, derrick. Lange & Mimms' No. 1 Mauldin, 155 feet to north and east line of 10-acre tract out of the Mauldin west 125 acres, J. Poitevant Survey, total depth 190 feet, W.O.C. Sun Oil Co.'s No. 1 Burnett, 371 feet to north line, 300 feet to east line of lease, South John Pace Survey, total depth 730 feet, drilling. The Texas Company's No. 2 J. R. Scott, 200 feet from north line, 150 feet from west line, J. M. Urango Survey, total depth 620 feet, drilling. The Texas Company's No. 3 J. R. Scott, 7,100 feet southwest of No. 1, J. M. Urango Survey, location. Union Producing Co.'s No. 10 George Ray, 150 feet north and 150 feet east of the southwest corner of Block 240, G. Neil Survey, total depth 4,040 feet, swabbing. Same company's No. 17 Ray, 1,200 feet north of No. 11, total depth 1,920 feet, drilling. Same company's No. 18 Ray, east offset to Buchannan & Ogden's No. 1, Block 38, George A. Kerr Survey, derrick. Same company's No. 19 Ray, east offset to Block 37 of townsite, total depth 401 feet, W.O.C. Same company's No. 20 Ray, east offset to Humble's No. 5 McKinney, 150 feet south of southeast corner of Pettus Townsite, George A. Kerr Survey, total depth 431 feet, set surface casing. Same company's No. 21 Ray, east offset to Block 40 of townsite, 900 feet south, 150 feet east of northeast corner of townsite, George A. Kerr Survey, derrick. Same company's No. 23 Ray, east offset to Block 39, 1,260 feet east of northeast corner of townsite; number changed from 22 to 23. Same company's No. 24 Ray, 812 feet from south line, 1,625 feet from west line of P. Miller Survey, total depth 381 feet, W.O.C. Same company's No. 25 Ray, 1,700 feet from the south and 1,400 feet from the east line of P. Miller Survey, location. Same company's No. 26 Ray, 2,500 feet from the south line and 2,000 feet from the east line of P. Miller Survey, location. Wilson & Hill's No. 1, Block 14 Townsite, center of Block 14 of Pettus Townsite, waiting on permit. Wilson & Hill's No. 1 Roberts, center of Block 16, Pettus Townsite, derrick. Nichols Oil Corp.'s No. 4 Hicks, 550 feet east of west line and 430 feet south of north line of Block 20 Jose M. Urango Survey, total depth 4,403 feet, showing of gas.

Pettus Area—Goliad County

Union Producing Co.'s No. 12 Ray, 2,350 feet southwest of northeast line, 300 feet northwest of southeast line, George A. Ray, 400-acre, William Southerland Survey, total depth 5,060 feet, drilling. Same company's No. 27 Ray, 1,500 feet from the southeast line, 4550 feet from the southwest line of J. Gomez Survey, location. Same company's No. 28 Ray, 150 feet from the south line, 800 feet from the west line of the E. Ray tract of 416 acres, location. Same company's No. 29 Ray, 450 feet from the north line, 215 feet from the west line of the survey, A.B.&M. Survey, location.

Lassiter Pool—Brooks County

Ed East's No. 1 B. Garcia, 1,700 feet west, 750 feet south lines of north 1,000-acre tract, Share A-1, Las Mestena Y. Gonzalene tract, total depth 1,109 feet. W.O.C. Houston Oil Co.'s No. 2 Holbein-Wormser, 2,100 feet from west line, 200 feet from south line, Holbein-Wormser 962-acre tract, E. P. de Maguellas Survey, total depth 3,242 feet, sand 3,235 feet, mud, oil, water.

Cartwright Field—Live Oak County

Houston Oil Co.'s No. 1 R. Boothe, 3,000 feet from west line, 300 feet from south line of 822-acre tract, M. B. Kilvin Survey, total depth 5,259 feet, rebuilding derrick. Houston Oil Co.'s No. 22 Cartwright, 500 feet east of No. 18, total depth 4,445 feet, drilling.

Saxet Field—Nueces County

Saxet Oil Co.'s No. 2 Donnegan, 2,150 feet due south of No. 1 Donnegan, 7 miles west from Corpus Christi, location. Saxet Oil Co.'s No. 6 John Dunn, 600 feet south of No. 5 Dunn, 4 miles west from Corpus Christi, total depth 4,304 feet, sand at 4,200 feet, showed oil.

GULF COAST

(Continued from Page 59)

son, Liberty County, Cranfill-Reynolds Oil Co. was put on the pump as good for 200 bbls. daily at 3,255 feet. High Island, Spindletop and Hull also added workover completions.

Deep Drilling Record

The abandonment of The Texas Company's No. 5 Rayne heirs on the southeast side of the Jennings Field marked the failure of an attempt to extend the deep production which has been found in three wells drilled by Yount Lee Oil Co. The Rayne well is approximately 1,600 feet southward from Yount Lee Oil Co.'s No. 6 Houssierre-Latrielle, the discovery well of the Jennings deep horizon, which, below 7,400 feet, is the deepest producing level on the Gulf Coast. The Rayne well went into heaving shale and was quit at 8,730 feet, setting a deep drilling record for the Gulf Coast.

A number of other interesting wildcats were abandoned during the week, including Humble Oil & Refining Co.'s No. 1 State (Lake Washington) on the Lake Grand Ecaille Dome in the extreme southern part of Plaquemines Parish, Louisiana, and Rycade Oil Corp.'s No. 1 Rapid City, Brazoria County, the first test drilled on the new Austin Bayou geophysical prospect. The former was quit at 5,422 feet and the latter at 6,284 fet. Others included three wildcats on as many new geophysical domes in Terrebonne Parish, Louisiana; one on the San Felipe Dome, Waller County; another in the E. Barrows Survey, southern Chambers County; one near Crosby, Harris County, and another at Lockport.

CALIFORNIA FIELDS

(Continued from Page 64)

wells under way, No. 6 Jones and No. 13 Thompson, is making preparations to start another, which will be designated as well No. 33 on Huntington Lease A. In the Coyote Field the Standard finished No. 104 Murphy Coyote pumping 515 bbls. of exceptionally clean 29.1 gravity oil from the shallow zone at 4,400 feet.

Santa Fe Springs

The Union Oil Co. added another well to its list of producers by finishing No. 16 Howard doing 725 bbls. of 32.5 gravity oil per day from the Meyer zone at 4,500 feet, the hole having been plugged back from 5,164 feet because of the inadvisability of carrying it down to the deep sands where the initial production would have been considerably smaller. The General Petroleum finished one new well and recompleted another in this field during the past week. The latter was No. 177-C Santa Fe which was returned to production doing 135 bbls. per day after being cleaned out to bottom, 5,700 feet. The company's new well was No. 231 Santa Fe, which was finished in the Meyer zone at 4,500 feet, from which depth it was good for 402 bbls. initially. The Texas Company also finished a new well at Santa Fe Springs during the week, well No. 16 on Mattern Lease No. 3, being good for 260 bbls. of unusually clean 34.9 gravity oil per day from the Meyer zone at 4,560 feet.

There were only a few wells finished in the Long Beach Field during the past seven-day period. The best of these was No. 49 Signal of the Dabney Johnston Oil Corp., which registered an initial daily production of 610 bbls. from 7,175 feet. A. N. Macrate's No. 1 Stevens, a former upper zone producer, was returned to production flowing 325 bbls. of 29.1 gravity oil daily upon being redrilled and deepened to 7,028 feet, the hole having been finished with a 4-inch liner carrying 675 feet of perforated. The Petroleum Securities failed to develop substantial production in No. 2 Graham upon completion at 6,687 feet but the initial daily output, 210 bbls., was nevertheless satisfactory as the oil tested 29.1° A.P.I. and was exceptionally clean. The Two-In-One Oil Co. successfully finished No. 2 Fee during the week but this new well was only good for 110 bbls. per day from 7,041 feet, notwithstanding that the hole was finished with a liner carrying 470 feet of perforated.

Midway-Sunset

The Standard finished a small well in the Maricopa Flats section of the Midway-Sunset Field of Kern County when No. 4 Fee, a new well in Section 9-11-23, was brought in on the beam doing 170 bbls. per day from 3,898 feet, the hole having been finished with a 6⅝-inch liner carrying 83 feet of perforated. In the Round Mountain Field the Honolulu Consolidated finished No. 99 in Section 18-28-29 and this new producer registered satisfactory production as it was good for 445 bbls. per day on the beam from 2,342 feet, the hole having been finished with an 8⅝-inch oil string including 257 feet of perforated. The Shell also added a new well to its list of producers in this field during the past week when No. 13 Jewett was brought in pumping 245 bbls. of 19.8 gravity oil per day from 1,650 feet, the hole having been finished with an 8⅝-inch liner carrying 227 feet of perforated.

Caroline Spalding successfully finished No. 4 Blue Goose, a new well located on State tideland permit No. 93 in the Elwood Field of Santa Barbara County, during the past week. This project came in under a natural flow doing 2,500 bbls. of exceptionally clean 36.1 gravity oil initially from 3,642 feet, but has subsequently built up to 5,000 bbls. and may exceed 10,000 bbls. per day upon conclusion of the five-day open flow test now under way. The General Petroleum is making preparations to extend its 1,400-foot Ferguson pier an additional 600 feet westerly in order to develop the Needham tideland permit, which adjoins the Ferguson permit. The drilling of this new well will involve the expenditure of approximately $250,000 as these drilling piers and equipment must be exceptionally strong in order to withstand the constant pounding of the ocean, especially during the winter season and when a strong tide is running. There were no wells finished in the Ventura Avenue Field during the week but a check indicates the probable completion of several new projects in the near future.

ROCKY MOUNTAIN AREA

(Continued from Page 60)

No. 2 Fowler, NW cor. NE, Section 31-18-38, is drilling at 2,680 feet in anhydrite. The anhydrite was topped at 1,920 feet.

George F. Getty, Inc.'s No. 4 McKinley, NW cor. NE, Section 30-18-38, is drilling at 3,991 feet in lime and had another show of gas at 3,756 feet, and its No. 5 McKinley, NE cor., Section 30-18-38, is still a location.

The Gypsy Oil Co.'s No. 2 Grimes, NE SE NW, Section 32-18-38, is bottomed at 3,943 feet and is standing with the 6⅝-inch cemented at 3,940 feet, and its No.

3 Grimes, NE cor. SW, Section 32-18-38, is drilling at 3,820 feet. Same company's No. 4 Grimes, NE cor. NW, Section 32-18-38, is bailing after cementing the 9⅝-inch at 2,745 feet, and its No. 5 Grimes, SW cor., Section 32-18-38, is drilling out cement. The 9⅝-inch was cemented at 2,794 feet. The Gypsy's No. 1 Graham, SE cor. NE, Section 24-18-37, is drilling at 2,105 feet.

Hobbs High, Inc.'s No. 1 Tatum, NW SW SW, Section 35-18-38, the farthest to the east of any drilling well, is shut down at 3,785 feet in lime for new drilling line.

The Humble Oil & Refining Co.'s No. 2-A Bowers, NW cor. SE, Section 30-18-38, is drilling at 4,012 feet in lime, and its No. 3 Bowers, SW cor., Section 29-18-38, is drilling at 3,949 feet in lime. Same company's No. 4 Bowers, SE cor., Section 30-18-38, is drilling at 3,833 feet in lime after killing a flow of 85,000,000 feet of gas at 3,691-93 feet. Humble's No. 5 Bowers, NW NE SE, Section 30-18-38, is drilling at 3,703 feet and had gas at 3,690 feet, and its No. 8 Bowers, SW cor. SE, Section 30-18-38, is drilling at 2,615 feet in anhydrite. Same company's No. 9 Bowers, SE SW NW, Section 29-18-38, is drilling at 2,738 feet in anhydrite, which was topped at 1,460 feet, and its No. 10 Bowers, NE NW SW, Section 29-18-38, cemented the 12½-inch at 205 feet.

Landreth Production Co.'s No. 1-B State, SW cor. NW, Section 33-18-38, is drilling at 3,520 feet in anhydrite and lime, and its No. 2-B State, CSL NW, Section 33-18-38, is drilling at 1,540 feet in the top of the anhydrite.

The Midwest Refining Co.'s No. 8 State, C NW NW, Section 10-19-38, cemented the 8⅝-inch at 4,016 feet, and its No. 26 Terry, C SE SE, Section 9-19-38, is drilling at 1,215 feet in red rock. Same company's No. 33 State, SE SW NW, Section 4-19-38, is drilling at 3,800 feet in lime and had a show of gas at 3,700-04 feet, and its No. 4 State, NE NW SE, Section 4-19-38, is drilling at 2,167 feet in salt, which was topped at 1,625 feet. The Midwest's No. 26 State, C SE NW, Section 4-19-38, is drilling at 3,354 feet in lime and anhydrite. It had a show of gas at 2,800-10 feet and a show of oil and gas at 3,157-3,242 feet. The Midwest's No. 3 State, NW NE SW, Section 4-19-38, cemented the 6⅝-inch at 3,988 feet.

The Ohio Oil Co.'s No. 2 State, SE cor. SW, Section 30-18-38, cemented the 12½-inch in red rock at 300 feet, and its No. 2 State-Northrup, C SE SE, Section 32-18-38, cemented the 7-inch in lime at 3,971 feet. Same company's No. 3 State-Northrup, NE cor. SE, Section 32-18-38, cemented the 7-inch at 3,974 feet, and its No. 4 State-Northrup, NW cor. SE, Section 32-18-38, is drilling at 2,350 feet in salt.

The Prairie Oil & Gas Co.'s No. 1 Grimes, SW cor. NW, Section 28-18-38, spudded on August 6 and is drilling at 124 feet in the red beds.

The Shell Petroleum Corp.'s No. 1 Berry, SE cor., Section 31-18-38, is drilling at 2,724 feet in anhydrite, and its No. 2 State, NW SW NE, Section 32-18-38, cemented the 6⅝-inch at 3,950 feet. Same company's No. 3-A State, SE cor. NE, Section 32-18-38, is drilling at 3,610 feet in lime and anhydrite, and its No. 4 State, SW cor. NE, Section 32-18-38, cemented the 9⅝-inch at 2,750 feet in anhydrite. Shell's No. 1-B State, NW cor., Section 33-18-38, spudded August 3 and is drilling at 142 feet in red rock, and its No. 1 Grimes, SW cor., Section 28-18-38, cemented the 12½-inch at 236 feet in the red beds. Its No. 2 Grimes, NW cor. SW, Section 28-18-38, is bottomed at 240 feet and rigging up rotary, and its No. 2 McKinley, SW cor. SE, Section 19-18-38, cemented the 9⅝-inch at 2,750 feet in anhydrite. Shell's No. 3 McKinley, SE cor., Section 19-18-38, is building rig, and its No. 4 McKinley, SE cor. SW, Section 19-18-38, is drilling at 1,705 feet in salt. The top of the anhydrite was at 1,460 feet. The same company's No. 5 McKinley, NW cor. SE, Section 19-18-38, is drilling at 1,598 feet in anhydrite, which was topped at 1,460 feet. The surface elevation is 3,460 feet. Shell's No. 6 McKinley, NE cor. SW, Section 19-18-38, is drilling at 1,455 feet in red rock, and its No. 7 McKinley, NW cor. SW, Section 19-18-38, spudded August 3 and cemented the 12½-inch at 240 feet in the red beds.

The Skelly Oil Co.'s No. 1 Fowler, NW cor., Section 31-18-38, is bottomed at 2,740 feet and straightening a crooked hole.

The Texas Production Co.'s No. 1-C State, NE cor., Section 25-18-37, is bottomed at 4,203 feet and running 3-inch tubing, and its No. 1 McKinley, NE NW SW, Section 4-19-38, is drilling at 3,200 feet in sand which made one bailer per hour of oil at 3,185-90 feet.

The Texas Pacific Coal & Oil Co.'s No. 2-G State, NE cor. SE, Section 24-18-37, spudded August 4 and is bottomed at 50 feet in hard rock.

The Tidal Oil Co.'s No. 1 Hardin, SW cor. NE, Section 19-18-38, is drilling at 1,620 feet in anhydrite, which was topped at 1,475 feet, and its No. 2 Grimes, SW SE NE, Section 29-18-38, is drilling at 1,651 feet in anhydrite, the top being at 1,550 feet.

Cooper Area—Lea County

The Texas Pacific Coal & Oil Co.'s No. 5-A State, C E half NE, Section 20-23-36, had a hole full of sulphur water at a total depth of 3,793 feet, and is being abandoned. It was located one-fourth of a mile to the northwest of the same company's No. 3 State, which made 380 bbls. of oil and 115 bbls. of water daily at 3,788 feet after plugging back. The results indicate that this will be a comparatively small pool in area.

Tatum Area—Lea County

A. D. Morton and others' No. 1 State, C NW, Section 32-11-38, in the northern part of Lea County, is being abandoned at a total depth of 5,267 feet. It had 3,300 feet of salt water in the hole at 5,180-85 feet. The surface elevation is 3,901 feet. The salt was topped at 2,380 feet and bottomed at 3,040 feet and the top of the lime was at 4,400 feet.

Eunice Area—Lea County

The Tidal Oil Co.'s No. 1 Colman, SW cor. NE, Section 17-21-36, had an oil and gas show at 3,849-67 feet and stopped at 3,868 feet to cement the 6⅝-inch. The Ohio Oil Co.'s No. 1 State-McDonald, NW SW, Section 15-22-36, is bottomed at 3,645 feet in lime and is reaming at 3,445 feet, and George F. Getty, Inc.'s No. 1 State, NE cor., Section 19-21-36, is drilling at 2,895 feet in anhydrite.

Caprock Area—Lea County

The Western Drilling & Engineering Co.'s No. 1 Bridges, SE cor. NW, Section 17-17-34, joint with the Texas Production Co., is rigging, and Gault, Brown and others' No. 1, C east line NE, Section 8-15-35, is a new location.

Jal Area—Lea County

The Midwest Refining Co.'s No. 19 Farnsworth, SW SW, Section 14-26-37, is drilling at 3,078 feet in lime and looks very favorable for a well.

Eddy County

Flynn, Welch & Yates' No. 58 State, SE, Section 29-18-38, south end of Artesia Pool, was completed at 2,022 feet and made 85 bbls. first 24 hours from the pay at 1,978-98 feet. Same firm's No. 2 Stevens, NE SW, Section 13-17-30, Maljamar area, is running casing at 2,940 feet. It was held up at 3,250 feet with considerable oil in the hole for some time on account of a fishing job. Lockhart & Co.'s No. 2-X Parke, NW NW, Section 23-17-30, is drilling at 2,960 feet. R. D. Compton's No. 3 Brainard, SW SE SE, Section 5-18-27, is drilling at 575 feet in shale.

Otero County

E. H. Ernest and others' No. 1 Ernest, SE cor., Section 20-25-7e, an operation not heretofore reported, is drilling at 465 feet in sand.

San Juan County

The Kutz Canon Oil & Gas Co.'s No. 1 Day, SW cor., Section 20-28-10, is making 400,000 feet of gas per day from the top of the Picture Cliff at 1,902 feet. The hole will be cased before drilling deeper. This well extends the Kutz Canon gas area about 2½ miles to the southeast.

COLORADO DEVELOPMENTS

A report to the effect that the Continental Oil Co.'s No. 1 Pipe Springs, NE cor. SE, Section 27-27-49, Bent County, had considerable oil coming into the hole after the 8¼-inch casing was pulled to abandon, gained wide circulation in the past week and created considerable interest. This well is in the southeastern part of the State where any kind of a show of oil would attract attention in view of the investigations which are being made in that district. The well was drilled to 6,084 feet and stopped in a conglomerate with 2,500 feet of water in the hole. It was being plugged to abandon and the 8¼-inch, which was set at 4,001 feet, had been pulled when the showing was reported. There was some oil in the hole and some was bailed out, but officials, after making an investigation, were convinced that it was fuel oil which had been put into the hole to circulate pipe. Samples of cuttings taken when the well was drilling at that horizon did not show anything. The more important water sands cut in this well were at 4,523-62 and 4,708-21 feet. This well is supposed to have topped the Pennsylvanian lime at 3,710 feet.

Fremont County

One completion was reported in the south extension of the Florence Pool in Donnelly Brothers' No. 2 McCandless, NW NE NW, Section 21-20-69, which was dry and abandoned at 3,100 feet. It had oil shows at 1,450 and 2,180 feet.

Huerfano County

The Midland Petroleum Co.'s No. 1 Campbell, NE SE, Section 4-29s-69, Oak View, is drilling below 300 feet, and the Ojo Development Co.'s No. 1, Section 5-29-69, is drilling at 352 feet in black shale.

Archuleta County

The Standard Oil Co. of Colorado's No. 1 Fitzhugh, SE SW, Section 34-33n-1e, Chromo Dome, is bottomed at 320 feet and has made little progress since encountering a good show of green oil at 310 feet, due to cavy ground. The oil continues to show in the hole through 70 feet of cavings. It is coming from the Pierre shale. A string of 12½-inch casing will be run before making any more hole. A No. 28 Star rig is being moved in to drill a location a little to the north of No. 1 Fitzhugh. While this structure has been known for a long time, it has never been thoroughly tested because the presence of igneous rock inside the escarpment created the opinion that any oil which might have been in the formations had been burned out. This theory did not hold good in the shallow fields in the San Juan Basin in northwestern New Mexico, which is to the southwest of this operation. At Hoback, Rattlesnake and Table Mesa high gravity oil is being produced from the Dakota, and on the Rattlesnake Dome a good grade of green oil was found in the Pennsylvanian. The Dakota is expected at around 700 feet on the Chromo Dome.

Montezuma County

The Mesa Verde Ranch Co.'s No. 2 Haller, SW NW SE, Section 33-36n-14w, Mount Lookout structure, topped the Dakota at 700 feet and encountered a flow of gas estimated at 200,000 feet a day. This well is three-fourths of a mile southeast of No. 1 Haller which was drilled a few months ago for water but encountered approximately 200,000 feet of gas in the Dakota and no water. It was drilled deeper and ran into water in a lower formation, but did not reach the Sundance. No. 2 Haller is intended as a Sundance test. The gas is very wet.

Mesa County

The Argo Oil Co.'s No. 1 Hoel, NE cor., Section 23-8s-104, High Line, is sidetracking at 2,765 feet.

Park County

The South Park Oil & Gas Co.'s No. 1 Eshe, SE cor. NW, Section 5-9s-76, Muleshoe Dome, is drilling at 445 feet in the Pierre shale. It had a small show of oil and gas at 425 feet. It also had a gas pocket at 280 feet. No important sand is expected under 1,800 feet. The South Park Oil Co.'s No. 1 Milligan, NE SE, Section 13-8s-76, Jefferson Dome, is preparing to run 10¾-inch casing at a total depth of 790 feet. The two companies are not in any way affiliated with each other.

Arapahoe County

J. W. Merritt and others' No. 1 Union Pacific, SE cor. NW, Section 17-5s-64, Watkins district, has commenced spudding.

Douglas County

The Perry Park Oil Co.'s No. 1 Cannon, SE NW, Section 11-9s-68, is drilling below 1,500 feet and is preparing to run night tour. This is a test of the Pierre shale down to the Niobrara.

Adams County

Nettie M. Slatt's No. 1 Hills, SE cor., Section 27-3s-64, Watkins district, is drilling at 2,300 feet in lime formation. It is carrying the 10-inch.

Larimer County

The Continental Oil Co.'s No. 1 Hoffman, SW NE, Section 23-4n-70, Deininger Dome, is bottomed at 485 feet and running the 10-inch. The formation which is productive on the Wellington Dome, to the northeast, at 4,500 feet, is at the surface at the Hoffman location, and the well is intended as a test of the Pennsylvanian. Subsurface geological information obtained in this well may be a determining factor as to whether a Pennsylvanian test will be drilled on the Wellington Dome which is producing from the Muddy sand of the Dakota series. The Continental's No. 3 Scott, SW SE, Section 6-9-68, Wellington Dome, a producer in the Muddy at 4,280-4,345 feet, which is being deepened, is bottomed at 4,570 feet and running the 6¼-inch. The 8¼-inch was lowered and set at 4,518 feet.

Routt County

The Texas Production Co.'s No. 7 Quaintance-Hocking, NE SE, Section 18-6n-86, Tow Creek, is bottomed at 3,640 feet with a cavy hole. It had some shows at this depth. Same company's No. 4 Carstarphin is waiting until the Quaintance-Hocking well is completed before spudding.

Moffat County

The Texas Production Co.'s No. 4 Wick, NW NW, Section 10-4n-91, Moffat Dome, which is to be deepened from the Dakota to the Sundance, is bottomed at 4,109 feet and cleaning out. Rotary rig is being used. Same company's No. 12 Knowlton, SW SE, Section 33-5-91, is shut down at 4,524 feet waiting for cement to set. S. H. Keoughan and William Myers' No. 1 State, SW SW, Section 16-4n-101, Midland Ridge Dome, or Skull Creek as it is sometimes known, is drilling in the Tensleep at 1,960 feet. It had a show of gas at 1,615 feet and a show of oil at 1,817 feet. The top of the Madison lime, the objective, is expected at around 2,300 feet. The Midwest Refining Co.'s No. 24 Hannewalt, SE SE, Section 4-6n-92, Bell Rock, is drilling in sand at 3,936 feet and had show of gas and rainbows of oil at 2,915-20 feet. It had 30,000,000 feet of gas in the Mesa Verde above the present depth. The objective Moraspas sandstone is expected within the next few hundred feet. The Texas Production Co.'s No. 1 Berlin, SW NE, Section 19-12n-100, Bartram Dome, is bottomed at 2,055 feet after plugging back and gas is being allowed to blow to clean hole of mud. It is making around 10,000,000 feet a day and increasing as the hole cleans itself. The sand at 2,002-55 feet gauged 24,000,000 feet when it was drilled through. The Mountain Fuel Supply Co.'s No. 1 Lasher, NE NE, Section 25-12-101, Bartram Dome, is cleaning out at 2,040 feet after plugging back from 2,756 feet to 2,180 feet. Same company's No. 2 State, SE NE, Tract 37-12-100, Hiawatha Dome, is spudding, and its No. 1 Musser, C NE, Section 5-11n-97, Powder Wash, is drilling at 1,410 feet.

Dry Hole in Idaho

The Grand Teton Oil Co.'s No. 1 Blevins, SW SE, Section 33-5n-44, Horseshoe Dome, is drilling in a dry hole at 2,915 feet, 70 feet in what is believed to be the Mowry shale (Aspen formation). Water was cased off with the 6¼-inch which was set at 2,844 feet. Rainbows and gas bubbles continue to appear on the bailings and a control head has been installed. Same company's No. 1 Bevan, NW SE, Section 28-5-44, is still fishing, and the Moneida Oil Co.'s No. 1 Rose, NE, Section 32-14-36, Clark County, is shut down at 1,360 feet.

WYOMING OPERATIONS

The Midwest Refining Co.'s No. 11

Middy, C NE NE, Section 23-35-79, Midway Dome, 10 miles north of Casper, drilled for joint account with the Saltmount Oil Co., in which Salt Creek Producers and Mountain Producers Corp. are interested, and the H. Leslie Parker interests, cemented the 9⅝-inch on top of the second Wall Creek at 5,157 feet after having cored and found the sand saturated at 5,157-87 feet. Bailing was in progress until midnight Wednesday when operations were suspended due to a defect in the equipment. The fluid had then been bailed down to around 3,000 feet. The next morning 1,500 feet of oil was standing on top of the water, having come up through the heavy mud. Another bailer was made, but it likewise proved defective and some delay followed in bailing down. However, the oil has continued to rise and approximately 2,000 feet is in the hole. The oil is 34° gravity, Be. scale, and compares with the crude in the second Wall Creek in Salt Creek. The sand was cored with a 9-inch bit. Bailing is being resumed as this is written and before it is read the fate of the well probably will be known. At present it is generally accepted that it will be a good well as far as can be judged by conditions. A perfect formation shut-off was secured before bailing began.

Fremont County

The deep test being drilled with a rotary by the Producers & Refiners Corp. on the Big Sand Draw structure in Fremont County in its No. 10, NW cor., Section 14-32-95, is an effort to get through the gas in the Frontier formation and explore the lower horizons for oil is reported unofficially to have lost its circulation at a depth of 3,457 feet and to have cleaned itself of the mud and to be making between 10,000,000 and 15,000,000 feet of gas. It is not known from what formation the gas is coming but it probably is either from the top of the Dakota or a second bench of the Muddy sand. This well is the first of a number drilled in the past 10 years which has successfully gone through the gas belt in the Frontier series and reached any lower sand on or near the top of the structure. Heavy mud was used to mud off the gas in the upper formations. After going through the Frontier it is said to have encountered a show of oil, but whether this was in the Mowry shale or the first Muddy is not stated. Coring has been in progress and it is not unlikely that the Muddy, generally referred to as the first of the Dakota series, was cored and then gone through with the rotary bit and that the same method was being followed in going through the next sand when the blowout occurred. It has been understood for some time that the company was desirous of testing all of the formations below the Frontier in this well and there is little doubt but that it has reached one or more of the Dakota sands and that encouraging shows of oil have been found. The gas pressure in the lower sand is said to be quite heavy and to be estimated at 1,500 to 1,600 pounds. The 15½-inch was cemented at 604 feet and no other string was run until the 10-inch was set at 3,426 feet. This string, apparently, was on top of a sand and the plug was drilled out the past week and preparations made for coring.

The Kinney-Coastal Oil Co.'s No. 1 Dykeman, SE SW, Section 22-3n-1w, Pilot Butte, another test that has gone through a sand making 63,000,000 feet of gas to explore for oil in the Dakota or lower formations, is drilling at 3,780 feet in shale. It passed through another thin sand that was dry. Representatives of the company's geological department express the opinion that these thin dry sands are fingers of sands in the Beckwith formation which is very thick in western Wyoming and Idaho, but which thins out toward the east. They are broken up by the Wind River Mountains to the west of Pilot Butte and the absence of shale accounts for them being barren. Acting on this theory, the Lakota sand, the next principal objective, is expected below the present depth. The Texas Production Co.'s No. 1 State, SW SW, Section 36-34-95, Alkali Butte, is bottomed at 4,472 feet and mudding off gas to go deeper. The 6⅝-inch is being lowered. It made 12,500,000 feet of gas and 20 to 25 bbls. of 31 gravity green oil of paraffin base per day in the Dakota at 4,380-93 feet, the sand being 13 feet thick. The Lakota and Sundance sands below the Dakota are productive in other parts of Wyoming. The Producers & Refiners Corp.'s No. 2, SW NE, Section 33-34-92, Muskrat Dome, is drilling at 3,990 feet in shale.

Weston County

The Osage Field in Weston County, northeastern part of the State, reported four completions, one of these being on a parity with the larger wells found in the Jones Pool during the past few months. This is the Osage Trust Co.'s No. 5, NE NW SE, Section 14-46-64, which found the sand at 1,670-80 feet and is flowing 30 bbls. per hour. The pay is the Muddy sand. The LaFleische Oil Co.'s No. 3, CEL SE SW, Section 17-46-63, is pumping 45 bbls. per day from the shale at 252 feet. It is between two producers. Dornacher and others' No. 2, SE SE, Section 12-46-63, found the sand at 1,222-33 feet and will pump 20 bbls. per day. Carl Cundy and others' No. 1, CWL NW NE, Section 31-46-63, found a dry sand at 1,371-1,417 feet. Osage drilling wells include the following: Moss and others' No. 1 Foster, NW SW SE, Section 24-46-64, set the 8¼-inch at 1,200 feet, and the Yellowstone Petroleum Co.'s No. 1, NE NW NE, Section 23-46-64, is a location. Hugh Updike & Sons' No. 2, SW NE NE, Section 14-46-64, is rigging up, and the Lambie Oil Co.'s No. 2 Bock, SW NE, Section 14-46-64, is running casing at 1,638 feet. James McCullough's No. 2 Logan McCullough, NE NE, Section 23-36-64, is drilling at 1,400 feet, and the Osage Trust Co.'s No. 4, NE NW SW, Section 14-46-64, is drilling at 1,400 feet. Osage Trust's No. 6, SW cor. SE, Section 14-46-64, is drilling at 375 feet, and Curtiss & Straitiff's No. 3 Updike, SW SE NE, Section 14-46-64, is drilling at 1,200 feet. Tom Don's No. 4, NW SE, Section 20-46-63, is drilling deeper at 1,215 feet. It had shows of oil and gas in sand at 1,146-52 feet. Henderson, Garbereck and others' No. 1 Bock, SW cor., Section 2-46-64, is shut down for water, and Bradley-Manuel's No. 10, SE NW, Section 20-46-63, is waiting for water before spudding.

Carbon County

C. E. Bivens and others' No. 1 Red Feather, NE SW SW, Section 36-13n-92, Baggs district, is drilling at 450 feet with the objective gas sand expected at 700 feet. The Producers & Refiners Corp.'s No. 16, Section 25-26-87, Ferris Dome, is preparing to abandon at a total depth of 3,175 feet. It was drilled deeper from 2,705 feet and was in the red beds at 3,100 feet. Same company's No. 3, SE NW, Section 2-19-88, Hatfield Dome, is drilling hard sand at 4,149 feet. It was in hard sand at 4,115 feet and at 4,128 feet pressure blew the water out of the hole. This well was a small gasser in the Dakota at 3,956 feet. Producers & Refiners' No. 4, Section 7-26-89, Wertz Dome, is bottomed at 3,386 feet and running 1¼-inch tubing to clean out hole. Last week it was reported fishing for tools at this depth. No new hole has been made since rig was built and tubing pulled to drill deeper.

Lincoln County

The Midwest Refining Co.'s No. 1 Larcher, SE SE, Section 25-37-117, Little Grays River, is bottomed at 2,276 feet in red mud, with hole caving and water flowing over the top.

Natrona County

A small completion in Salt Creek was reported in the Wyoming Associated Oil Co.'s No. 31-LS, SW, Section 25-40-79, which was plugged back from the Lakota sand and completed in the Lakota shale at 1,825 feet as an 8-bbl. well. The Midwest Refining Co.'s No. 29-DT, NW, Section 35-40-79, Salt Creek, is drilling at 4,990 feet in the top of the Deadwood formation after casing off the Madison lime at 4,000 feet with the 6⅝-inch.

Park County

The California Exploration Co.'s No. 2, NW NE, Section 14-48-102, Pitchfork Dome, being drilled by the Producers & Refiners Corp., is making hole at 3,800 feet with a hole full of black oil. The Midwest Refining Co.'s No. 31 Rosenberg, SW cor. SE, Section 24-58-98, Frannie Dome, is drilling at 2,200 feet in gray sandy shale, and its No. 31 Frannie Oil, SW cor. NE, Section 25-58-98, is drilling at 2,820 feet in red sandy lime. The Yellowstone Petroleum Corp.'s No. 1, NE SE, Section 7-57-97, South Frannie, is drilling at 3,912 feet in the Madison lime. The Cody Petroleum Co.'s No. 1 Danker, SW cor., Section 22-57-98, Big Pole Cat, is being abandoned at 3,340 feet on account of bad hole. Rig will be skidded and another hole started. It had 7,000,000 feet of gas in the second Frontier at 2,657-2,783 feet. The Tensleep was expected at 5,500 feet. The Continental Oil Co.'s No. 26 Elk 2, SE NE, Section 24-58-100, Elk Basin, is bottomed at 2,070 feet and cleaning out at 2,040 feet. The Texas Production Co.'s No. 1 Freeman, C NW SE, Section 30-51-100, Oregon Basin, is bottomed at 3,486 feet and running milling tool. The Oneida Oil Co.'s No. 1 Beck, SW cor., Section 28-52-100, is standing at 3,710 feet with tanks up, but has not yet drilled in and completed.

Big Horn County

The Ohio Oil Co.'s No. 1 Union Gas, NE cor., Section 22-56-97, the oil discovery well on the Byron Dome, is shut in awaiting pipe line connections. The tankage has all been filled and when the well was shut in it was making 600 bbls. a day natural. A 2-inch line to the railroad, 8 miles away, which heretofore has been used for gas, is being reconditioned for oil and when completed the tankage at the well will be emptied and the well opened for a 30-day test. The Ohio company is starting another well on this dome in its No. 1 Pryde, Section 25-56-97, which is drilling at 200 feet. Sweet gas in the Frontier is expected at 2,500 feet. The same company's No. 1 Easton, SW NE, Section 33-56-97, Garland Dome, joint with the Utah Southern Oil Co., which opened up a flow of 58,000,000 feet of gas in the Madison lime, is standing with the 7⅝-inch cemented at 3,887 feet. It is planned to drill deeper in hopes of picking up oil deeper in the lime.

Hot Springs County

The Gebo Consolidated Oil Co.'s No. 1, SW cor., Section 23-44-95, Gebo Dome, is resuming at 1,335 feet and expects the second Wall Creek within the next 100 feet. The Ohio Oil Co.'s No. 1 Smith, SE NE, Section 9-46-99, Walker Dome, is standing at 4,403 feet waiting for rotary. The Midwest Refining Co.'s No. 8 Weeks, NW SE, Section 6-44-98, Wagonhound, is bottomed at 2,820 feet with hole full of water and is underreaming the 8¼-inch.

Sweetwater County

The Mountain Fuel Supply Co.'s No. 1 Hay, NE cor., Section 26-17-104, South Baxter Basin, was completed in the Dakota at 3,500 feet as a gas well and gauged 4,000,000 feet open flow. Same company's No. 2 State, Section 16-16-104, cemented the 6⅝-inch at 2,170 feet, and its No. 1 Union Pacific, NW NE, Section 13-19-104, North Daxter Basin, is drilling at 3,145 feet.

Niobrara County

The Ohio Oil Co.'s No. 4 Converse Sheep, SW SE, Section 32-36-65, Lance Creek, is drilling at 2,640 feet. The Argo Oil Co.'s No. 7 Wehopeso, SW NW, Section 19-39-60, Mule Creek, is drilling at 2,975 feet in the Tensleep with 1,650 feet of water in the hole.

MONTANA

The test being drilled on the Cut Bank structure in northern Montana by L. B. O'Neill and L. W. Hill has come in with a flow of 15,000,000 feet of gas per day. It is several hundred feet below the horizon at 2,260 feet, where it had 1,000,000 feet of gas. This district, which is about 25 miles long and 10 to 15 miles wide, is an entirely new area on the flank of the Sweetgrass Arch. The O'Neill gasser is several miles to the east of The Texas Production Co.'s No. 1 Small, SW SW, Section 13-35n-6w, which is drilling at 1,500 feet. If production is found in The Texas Company's well, it will be very significant, particularly if it comes in as a gasser it will mean a big extension of the proven gas area. It is 3 miles north of the discovery and is reported to be checking higher on the structure. The Texas Company recently acquired a 2,000-acre block upon which is the No. 1 Small, which had been drilled to 750 feet when taken over.

The Heinrich interests of Minneapolis, Minn., have taken over a large block of leases in the Soap Creek Field, with five wells and are to start operations in the near future. It is proposed by the company that a pipe line will be laid to Billings and a refinery built there to handle this oil. The Soap Creek crude is a heavy, black oil with a rather small gasoline content. It refines to an excellent grade of road oil. The price paid was $500,000 and a part of the production for some months after the wells are on production.

The Black Gold Petroleum Co. on the Berthelote Dome, northeast of the Sunburst Field, in the Sweetgrass Hills, shot the No. 1 well that came in with a showing of oil three weeks ago and the shot helped the well. It is now being cleaned out preparatory to pumping.

Rocky Mountain Production

Daily average pipe line runs from the various pools in the Rocky Mountain area for the week ending August 16:

WYOMING	
Salt Creek	26,910
Frannie	130
Big Muddy	1,730
Oregon Basin	2,920
Dutton	50
Elk Basin	770
Byron	10
Warm Springs	130
Lovell	20
Ferris	30
Grass Creek	2,170
Hamilton	910
LaBarge	1,950
Lance Creek	130
Lost Soldier	2,700
Osage	750
Poison Spider	240
Rock River	2,170
Simpson Ridge	50
Teapot Dome	30
Dallas-Derby	240
Hudson	230
South Casper Creek	1,080
Cody	50
Total	45,400
MONTANA	
Cat Creek	1,150
Kevin-Sunburst	5,850
Pondera	2,030
Lake Basin	50
Border	480
Total	9,560
COLORADO	
Moffat	1,142
Fort Collins	1,279
Florence	430
Iles	1,147
Tow Creek	372
Boulder	25
Rangley	50
Total	4,445
NEW MEXICO	
Hogback	440
Rattlesnake	1,298
Table Mesa	111
Artesia	733
Cap Rock (Maljamar)	824
Jal	1,414
Hobbs High	33,864
Lea City	4,850
Miscellaneous (Lea County)	305
Total	43,839
Grand total	103,244
Week ending August 9	103,893
Difference	649

KANSAS FIELDS

(Continued from Page 52)

Streeter's No. 1 Luker, SW cor. NE, Section 26-13-20w, has been abandoned at 4,078 feet.

Gove County

Johnson & Atlantic have staked location for No. 1 Wright, C SE NE, Section 11-12-27w.

Greenwood County

The Prairie Oil & Gas Co.'s No. 7 Newhouse, C NE NE, Section 1-24-11, is a location. No. 6 Newhouse, NE cor. NW NE, Section 1-24-11, has been completed in sand 1,742-63 feet, for 110 bbls. after plugging back from 1,782 feet. Phillips Petroleum Co.'s No. 6 Beal, SW cor. NE NE, Section 28-23-11, is a rig.

McPherson County

Aladdin and Phillips and others' No. 1 Larson, C NW, Section 22-18-4w, is a rig on ground. McPherson Oil & Gas Development Co. and Shell Petroleum Corp.'s No. 1 Hill, C NE, Section 10-19-2w, is a location. No. 1 Fleming, C NW, Section 11-19-2w, is a location. No.

1 Lovett, C NW, Section 13-19-2w, is a location. Mid-Kansas Oil & Gas Co. is moving in material for No. 1 Stephens, SW cor. NE, Section 30-19-1w. Same company has staked location for No. 1 Lindberg, C NE, Section 15-19-2w. The Texas Company's No. 3 Munn, NE cor. SE NE, Section 12-20-2w, is a cellar. Gypsy Oil Co.'s No. 3 Kinney, NW cor. SW SW, Section 34-20-3w, has been completed for 1,025 bbls. in sand 3,386 feet. Slick, Pryor and Lockhart's No. 2 Grattam, SW cor. NW, Section 34-20-3w, has been completed for 1,100 bbls. in sand 3,447-67 feet, total depth 3,476 feet. Barnsdall Oil & Refining Co.'s No. 6 Krehbiel, NW cor. SW SE, Section 4-21-3w, has been completed for 700 bbls. in sand 3,405-21 feet. Shell Petroleum Corp.'s No. 1 Newfeldt, NW cor. NW, Seciton 15-21-3w, made 440 bbls. in sand 3,392-3,400 feet.

Harvey County

The Texas Company's No. 1 Zook, NW cor. NE SW, Section 36-22-2w, is a cellar.

Morton County

Argus Production Co.'s No. 1 Burton, C SW, Section 11-33-40w, has been completed for 15,000,000 feet of gas in sand 2,545-700 feet, total depth 2,761 feet. No. 1 Morgan, C SW, Section 6-33-39w, made 1,994,000 feet of gas in sand 2,473-50 feet. No. 1 Mangel, C NE, Section 20-33-39w, has been completed for 8,137,000 feet of gas in sand 2,460-704 feet.

Reno County

Braden & McClure and others' No. 1 Friessen is a rig on ground.

Rice County

Producers & Refiners' No. 2 Thompson, SW cor. SE NW, Section 21-20-10w, is a location.

Russell County

The Texas Company's No. 3 Jacobs, SW cor. NW SW, Section 31-12-15w, is a rig on ground.

Sedgwick County

Bob Cosby and others' No. 1 Hutson, SE cor. SE, Section 1-27-1, is a location. National Refining Co. and others' No. 1 Murdock, SW cor. SE SE, Section 18-27-2, is a location. Derby Oil Co. is building rig for No. 1 Eastborough "A," CSL SE SW, Section 19-27-2. Blankenship Petroleum Co.'s No. 2 Shaffer, SE cor. NE NW, Section 30-27-2, is a rig no ground. Producers & Refiners have staked location for No. 1 Turner, NW cor. SE, Section 30-27-2. Mission Oil Co. and others' No. 1 Carlton, SW cor. NW NW, Section 23-28-1, is a rig on ground.

Stevens County

Argus Production Co. has staked location for No. 1 Olsen, C SE, Section 1-32-38w. No. 5 Ratcliff, C SE, Section 26-32-38w, is a location. Same company has staked location for No. 2 Ratcliff, C NW, Section 8-33-37w. No. 1 Ellis, C NE, Section 12-33-38w, is a location. No. 2 Sherwood, C SW, Section 33-33-37w, is a location. A location for No. 3 Ratcliff fee, C NW, Section 7-34-38w. Trees Oil Co.'s No. 1 Morris, C NE, Section 32-34-38w, is a location. No. 1 Wheeler, C NE, Section 35-34-38w, is a location. Same operators staked location for No. 2 Brecheisen, C SW, Section 9-35-38w. No. 1 Beaver, C SE, Section 11-35-38w, is a location. Argus Production Co.'s No. 1 Mitchell, C NW, Section 18-35-37w, is a rig.

Sumner County

The Prairie Oil & Gas Co.'s No. 2 McIrvin, CNL, Lot 7, Section 3-35-2e, has been completed in chat 3,313-42 feet, for 60 bbls. No. 5 Olsen, SW cor. SE, Lot 3, Section 3-35-2e, has been completed for 20 bbls. at 3,458 feet after plugging back from 3,466 feet. Champlin Oil & Refining Co.'s No. 5 Love, SW cor. NW SW, Section 9-30-2w, has been completed for 30 bbls. in sand 3,222-30 feet, drilled to 4,160 feet and plugged back to 3,250 feet.

Woodson County

Empire Oil & Refining Co.'s No. 1 Lawton, NE cor. NW, Section 29-24-14, is a machine.

COLON PRODUCTION

Production of Colon Oil Corp.'s subsidiary in Venezuela for the week ended August 8 was 98,237 bbls.

UPS AND DOWNS OF CRUDE PRODUCTION

(Continued from Page 39)

unit development plan, while others might have reached the select class but were held back because of the critical market situation. The Gulf Coast area witnessed the discovery of a considerable number of productive salt domes in Texas and South Louisiana that helped to swell the production of the "miscellaneous" pools this year.

CHANGES IN PRODUCTION IN FOUR YEARS

Average daily production of more prominent pools in the United States in June 1927, 1928, 1929 and 1930.

	Average Daily Production			
	June 1927 Bbls.	June 1928 Bbls.	June 1929 Bbls.	June 1930 Bbls.
Oklahoma City, Okla.	.....	.....	5,041	113,475
Darst Creek, Texas	.....	.....	.....	24,298
Van, Texas	.....	.....	.....	25,160
Penn Pool, Texas	.....	.....	.....	18,510
Mount Poso, Calif.	62	1,359	4,837	13,215
Kettleman Hills, Calif.	.....	.....	3,305	19,344
Inglewood, Calif.	34,371	30,202	22,611	17,212
Elwood, Calif.	.....	.....	26,429	43,690
Mission, Okla.	.....	.....	37,660	11,533
Konawa, Okla.	.....	.....	.....	22,266
Hobbs, New Mexico	.....	.....	.....	11,629
Sasaskwa, Okla.	.....	.....	.....	8,287
Barbers Hill, Texas	734	576	8,659	22,375
Raccoon Bend, Texas	.....	35	5,936	12,004
Dewalt, Texas	.....	245	11,675	11,979
Humble, Texas	4,436	3,339	5,623	14,465
Refugio, Texas	.....	.....	2,665	35,214
Bruner, Texas	.....	.....	49,858	23,487
Shackelford, Texas	7,757	10,607	11,867	6,186
Wright Pool, Kansas	.....	.....	36,599	15,014
Voshell Pool, Kansas	.....	.....	221	21,305
St. Louis-Pierson-Maud	4,141	22,680	100,004	34,460
Seminole City, Okla.	118,221	51,036	34,469	21,956
Earlsboro, Okla.	66,414	87,014	64,405	78,935
Bowlegs, Okla.	144,490	61,121	35,403	21,422
Searight, Okla.	37,370	14,118	12,232	10,961
Little River, Okla.	.....	44,063	77,482	51,763
Seal Beach, Calif.	66,338	36,835	46,651	20,401
Winkler County, Texas	1,231	148,566	142,651	69,306
Yates Pool, Texas	7,451	52,477	105,511	112,850
Upton-Crane, Texas	69,147	68,919	48,848	39,636
Sholom-Alechem, Okla.	16,950	16,016	13,019	13,247
Sumner County, Kansas	18,365	24,415	12,900	8,868
Smackover, Arkansas (heavy)	88,266	58,974	48,595	39,307
Champagnolle, Arkansas	.....	25,368	7,631	4,232
Long Beach, Calif	93,461	194,356	169,018	93,069
Midway-Sunset, Calif.	89,651	70,846	64,601	62,714
Hutchison County, Texas	101,014	37,018	26,546	23,123
Huntington Beach, Calif.	89,651	53,414	42,104	28,499
Salt Creek, Wyoming	42,715	41,911	29,058	28,262
Santa Fe Springs, Calif.	42,006	38,801	237,466	113,048
Inglewood, Calif.	34,371	30,202	22,611	17,212
Burbank, Okla.	44,983	30,615	19,765	16,115
Spindletop, Texas	60,525	41,342	27,647	17,659
Ventura Avenue, Calif.	37,497	48,646	59,270	48,288
Tonkawa, Okla.	21,493	13,814	10,023	7,310
Elk Hills, Calif.	25,012	23,563	15,174	19,334
Archer County, Texas	28,140	21,475	18,050	19,010
Garber, Okla.	14,116	8,523	5,690	4,304
Big Lake, Texas	24,814	17,610	18,262	17,615
Powell, Texas	16,418	11,388	7,982	5,782
Torrance, Calif.	23,343	14,234	12,801	11,607
Wewoka, Okla.	19,175	6,494	4,787	3,711
Bristow, Okla.	21,816	14,816	13,114	12,490
Luling Texas	16,343	14,116	11,861	9,673
Dominguez, Calif.	15,914	12,212	9,711	10,085
Cushing-Shamrock, Okla.	19,271	17,214	16,415	13,832
Coalinga, Calif.	19,842	10,630	9,320	9,370
Howard County, Texas	3,327	4,725	44,195	30,350
Hull, Texas	17,044	11,587	9,122	9,490
Fullerton, Calif.	16,903	15,697	12,487	12,219
Teeter-Pixley, Kansas	10,606	6,690	5,216	3,990
Sunburst, Montana	11,300	8,550	6,860	5,945
Montebello, Calif.	15,193	12,146	9,533	7,239
Bradford-Allegany, Penna.-N.Y.*	19,400	21,500	27,300	38,000
Cromwell, Okla.	12,966	9,609	7,970	7,514
Electra, Texas	14,996	13,176	13,410	11,077
Rosecrans, Calif.	9,350	12,212	6,032	6,911
Coyote, Calif.	13,742	13,435	10,598	10,330
Smackover, Arkansas (light oil)	11,060	7,715	6,071	5,240
Braman, Okla.	7,556	4,521	3,668	3,291
Richfield, Calif.	21,988	19,112	18,583	8,951
Healdton, Okla.	14,937	13,972	12,477	11,910
Wilbarger, Texas	13,116	19,795	26,573	23,756
Lovell-Marshall, Okla.	.....	5,771	16,572	5,771
Seeley, Kansas	10,990	7,204	6,189	7,269
Mexia, Texas	10,400	7,066	5,410	4,229
Caddo, Louisiana	14,437	13,064	11,997	11,581
Davenport, Okla.	3,282	2,016	1,461	1,202
Burkburnett, Texas	13,211	11,101	10,010	9,073
Brown County, Texas	23,544	13,117	7,752	6,659
Kern River, Calif.	18,997	6,651	14,510	14,344
Mirando, Texas	13,350	6,591	11,196	11,024
Hewitt, Okla.	9,610	9,444	8,087	7,316
Urania, Louisiana	8,460	7,220	5,890	2,131
Graham-Fox, Okla.	8,999	7,199	5,618	4,643
Mounds-Beggs, Okla.	8,383	7,222	4,674	3,536
Orange, Texas	5,875	4,209	2,983	2,230
Gray County, Texas	11,510	20,687	51,315	72,360
Papoose, Okla.	6,842	4,304	3,263	2,802
Haynesville, La.	7,752	6,353	5,237	4,641
West Columbia, Texas	9,227	8,020	6,097	5,705
Wortham, Texas	3,190	1,901	1,241	814
Ventura-Newhall, Calif.	5,959	5,619	4,876	4,810
Pierce Junction, Texas	7,767	11,545	17,772	13,303
South Liberty, Texas	2,978	4,041	5,604	4,433
Homer, Louisiana	5,134	4,378	3,972	3,171
Allen, Okla.	647	21,279	23,739	20,378
Rainbow Bend, Kansas	2,144	1,372	1,117	1,691
Sholom-Alechem, Okla.	16,950	16,016	13,019	13,247
Total 100 fields	2,030,439	1,939,037	2,303,570	2,044,680
Other fields	471,571	449,607	476,424	542,631
Total United States	2,502,010	2,388,644	2,779,994	2,587,311

PIPE ORDER PLACED FOR ALABAMA LINES

(Continued from Page 69)

a decrease and the second half as a whole was unusually good.

By a long range view, in the retrospect, it appears that early this year steel had a momentum left over from the previous activity, rather than having a backset on account of the recent stock market collapse. It did better in the first five or six months of the year than in the past few weeks. July production was in lower relationship to production during the first half of the year than has usually prevailed.

It does not follow, however, that steel activity is now engaged in progressive decrease. Rather it seems that all the losses have already been encountered. There is no steel consuming line marked for further decreases, while there are chances of some having increases, seasonal or otherwise. Thus far the increases are simply not in evidence. Not much is to be expected of the automobile industry. A couple of weeks ago it appeared to be having quite a resumption, but it bought little steel for the purpose, evidently having some stock of steel and parts left over.

Steel prices show a little easier tone in some respects. Bars, shapes and plates are quotable at 1.65 cents flat against 1.65 to 1.70 cents hitherto.

GULF COAST OPERATORS ORGANIZE COMMITTEES

(Continued from Page 37)

have obligations requiring wells to start within 90 days; cause for further drilling and number of new wells to be started within next 90 days; can drilling be curtailed further in the future? If not, why not?

Due to the fact that Gulf Coast fields are peculiarly localized, with many of them controlled and owned either by one operator or several collectively, any plan for the curtailment of production or drilling will have to be governed by the conditions in each individual field and by mutual consent of the operators. The general committee, however, has suggested certain methods for the conservation of oil and reduction of production, as follows:

1. Limit drilling to lease obligations.
2. Shut down unnecessary wells after casing is set wherever possible.
3. Place flowing wells on small chokes, giving a minimum gas oil ratio.
4. Arrange future locations so that a minimum number of offsets will be necessary.

Pumping wells in the Gulf Coast will be eliminated in the curtailment program, and, for the most part, the restriction on flowing wells will not be so much a matter of shutting in these wells as one of increasing the efficiency of flowing methods to minimize any waste of natural resources. The greatest result probably will be obtained by the elimination of needless drilling.

Gulf Coast fields, under the order of the state railroad commission, have been allotted a daily production of 150,500 bbls. in the state-wide program of prorating the production on the basis of a total of 750,000 bbls. The Texas coastal fields have been producing for some time above 170,000 bbls. daily, which means that a reduction of around 20,000 bbls. daily will have to be made. In making these apportionments, the Refugio and Pettus Fields have been included in the Texas coastal figures, although these fields at first had been listed in Southwest Texas.

CZECHOSLOVAKIA NAPHTHA

The yield of the Czechoslovakia State naphtha wells at Gbley on the Moravian-Slovak frontier in 1929 was 87,759 quintals and for the first half of the current year the output has been 69,058 quintals, so that this year's total yield promises to be well in excess of last year's. There was, in particular, a considerable advance in output in June owing to the recent opening of operations in a new area somewhat to the east of the previously existing wells.

MID-SUMMER ROTARY DRILLING FANTASY

(Continued from Page 39)

three will follow quickly for they only have a mud column 1,104 feet high left after the 9-inch casing is cleared.

Might Repressure Area

Inasmuch as four wells produce through one string of 9-inch casing the need of fittings for three Christmas trees for the wells not drilled is eliminated and the hook-up at the well head can, therefore, be made with great care and no expense spared. The sand traps, oil and gas separators, field storage tanks and other surface details can be selected to handle the production that would be expected from four wells, for they will be discharging through the 9-inch string at the surface.

It is possible that the central vertical well could be drilled straight down into the producing sand and cased with 7-inch pipe and cemented up to the bottom of the 9-inch pipe and in this way a five-well lease will be drilled and produced through the one upper well.

It is suggested that this extension of the central well into the sand might provide a means of returning the formation gas to the lease much as it is being done at Sugarland, Tex., by the Humble Oil & Refining Co. and fully described in Neil Williams' article on Page 31 of the August 7 issue of The Oil and Gas Journal.

By returning this formation gas to the sand the oil would be kept under its original pressure in the four corner wells and the experiment at Sugarland indicates that the pressure on this sand will be maintained over a long period so the need of air lift or other producing method is retarded.

As the oil would be forced from the center of the lease toward the edges it might be assumed that some of it would escape into the sands under adjacent leases, but the points of outlet for the lease being produced by this method would still be the same as if it were drilled in the regular way with four vertical holes, it hardly seems probable that this loss would be appreciable.

Artificial Production Method

If it did become necessary to produce the wells with gas lift, experience has shown that in deep wells the fluid level is high for some time and it is therefore possible to produce this combined well with gas lift by running in tubing to a predetermined point below the fluid level of the oil in the 9-inch string and as this oil is removed the pressure on the sand in the four angle wells will also be relieved and they will produce just as some Oklahoma City wells are now being handled.

If it becomes necessary to lower this tubing, it is possible that four strings could be inserted inside the 9-inch or larger upper casing and each be led into its particular angle well and then the angle well could be produced just as it would be if it had been drilled straight to the sand.

The objection might be raised that the four angle wells might tend to "buck" one another in entering the bottom of the upper casing. This might be anticipated and adjusted by either drilling smaller angle wells or a larger vertical upper portion central well. Data are available that can be used that will quite closely approximate the capacity of vertical flow strings when bottom hole pressures are known.

Legal Phase of Operation

It is easy to assume that some one of the owners of adjacent leases to one on which such a method of drilling and producing is tried might object to having wells drilled in the direction of their property on the basis that they would have no knowledge as to whether such wells actually stopped at the property lines or continued on into the adjacent property.

To anticipate this it is suggested that a very accurate survey of the angle wells be kept at all times and when it is remembered that with a total deflection from vertical of 2½° in a 6,500-foot hole the bottom may be anywhere within the circumference of a 283-foot radius circle, the chance of the angle well getting out of bounds is no greater than with the vertical well.

With honesty of purpose governing the operations there would be no greater hazard to offset acreage than under present methods and if careful surveys were made plenty of data would be available at all times to guide the drillers as well as to supply the legal department with evidence in the event of lawsuit for trespassing on the property of a neighbor.

Deferred Production

To complete the four angle wells would naturally take longer than to drill one straight hole into the sand and put it on production. Records of Oklahoma City wells show that it took an average of 38 days to drill wells from the bottom of the 9-inch casing, set at 5,500 feet, to 6,500 feet and allowing seven days for cementing and nine days to complete well the total time to complete this last 1,000 feet of hole is 54 days.

This 54 days could be taken as a guide to the time that would be required to complete each of the four angle holes or a total of 226 days in addition to 60 days required to drill and cement the 9-inch casing. This would make the total time on the lease for four wells about 286 days.

Under the four vertical well system the first well would be completed in about 123 days and unless drilling was going on in a second well at the same time it would take another 123 days to complete the second well, or a total of 246 days to complete two wells to get protection against drainage from offset wells.

Under the present proration ruling in Oklahoma City a well must be shut in for a period of 65 days after it is completed and has been tested, so, while it might be possible to gain about 40 days in the time required to complete the two vertical wells, this time would give no special advantage in drainage for the 65 days shut down would still permit the angle wells to be completed to all four corners of the lease, giving complete protection against drainage and at the saving of duplication of drilling the upper 5,500 feet of hole in corner wells.

There would be a decided financial gain by using the central and angle well system suggested and it is thought that this would be sufficient to offset any possible loss of oil to competitive wells that might be completed earlier for under proration rulings wells are all restricted in their output and the time for recovery of the oil materially extended.

An Alternative Suggestion

It is rumored that one company in Texas has actually drilled a vertical hole into a producing horizon and then with special drilling equipment has drilled at right angles, or in a horizontal direction, from the bottom of this hole. It is stated that the tool worked quite successfully and the inventor stated that he did not think that the method would be limited either as to direction of horizontal hole or number that might be run, or the distance drilled from the vertical well.

This is in effect sinking a vertical bored shaft and then running drifts from it into the oil sand. It is not understood that the system is perfected, but it has given so much promise that it is understood it will be developed as rapidly as possible and offered as one solution to drilling problems and a means of lower drilling and production costs.

The idea of angle holes from the bottom of a main vertical central well may at first glance seem to present too many "bugs" to be possible of application, but this is offered to the petroleum engineers and production men and drillers as a problem for these hot summer nights and comments, criticisms and suggestions will be welcomed. The idea is not patented.

BRADFORD AND ALLEGANY CONSERVATION REPORT

OIL CITY, Pa., Aug. 16.—The Bradford Conservation Board has determined that as a result of July's business the producers of the five-year co-operative conservation agreement have reduced their production a total of 12,419 bbls. daily, comparable with April. They have also found that the producers who have not signed such agreement reduced their production in July an average of 836 bbls. per day. This makes a total reduction of 13,255 bbls. and reduces the Bradford Field output for July to 20,466 bbls. per day comparable with 33,721 bbls. in April.

The Allegany District Conservation Board has found that the producers in their area have reduced their production 2,750 bbls. per day and have maintained an average of 7,111 bbls. in July, comparable with 9,861 bbls. in April. Stephen C. Pohe, chairman of the Allegany Conservation Committee, has announced that more than 85 per cent of the total production in that area has been signed to the five-year co-operative conservation agreement.

The Bradford Conservation Board has completed the office details necessary to currently check the production of all the producers who have signed that agreement, and are notifying them three times per month as to their performance. The Bradford board is arranging to send men to other areas to aid in setting up similar accounting, which it is believed will be helpful and should expedite this important detail.

While the figures for Pennsylvania grade production are not available the reduction in Allegany and Bradford Fields would indicate that in no case could the total production exceed 64,000 bbls. per day, and whatever reduction has been made south of Bradford would be deducted from this figure. Estimates vary but some forecasters feel as though the Bureau of Mines may announce the Pennsylvania grade production as low as 61,000 bbls. for July. The exact amount that has been run to stills during the period has not been determined, but it is believed it will closely approximate the total production. The amount run to stills in June averaged 63,000 bbls. daily, but it is known that the July runs were at a reduced rate.

The Bradford and Allegany Conservation Boards are very confident that their producers will maintain their August production at a rate less than July and anxiously look forward to receiving the co-operation of the southern producers, and feel that as a result of the performance for August, it will be found that the supply and demand for Pennsylvania crude is in balance.

BUREAU IS STUDYING BLACK OIL REFINING

WASHINGTON, D. C., Aug. 16.—Engineers attached to the Laramie, Wyo., field office of the United States Bureau of Mines recently made an extended trip through Wyoming collecting samples and data pertaining to the black oil fields of that State, it is stated by the United States Bureau of Mines, Department of Commerce. After these samples have been analyzed, a report will be published showing the characteristics of the different crudes as determined by the Bureau of Mines Hempel method.

Wyoming has a considerable potential supply of so-called black oils, but at present a number of the wells are shut in due to the fact that there is difficulty in manufacturing commercial products from these crudes at present day prices and by the present conventional methods of refining, the bureau states. It is hoped that the work as conducted by the Laramie office, when finished, will give some light on better methods of refining for these black oils and thus make these crudes more desirable commercially.

COUNTY ROAD IMPROVEMENT

The counties of the United States improved 45,481 miles of local and county roads in 1929, and the total in the county road system now is 2,710,097 miles, according to the Department of Agriculture.

WILDCAT OPERATIONS IN TEXAS PANHANDLE

(Continued from Page 71)

Beck's No. 1 Sullivan, 330 ft. N and E, W½ NW, Sec. 135, Blk. 3, I.&G.N. Sur. ..... Location.

Cockrell-McIlroy Oil Co.'s No. 1 Baer, 330 ft. S and W, NE, Sec. 126, Blk. 3, I.&G.N. Sur. ..... S.D. 2,596 ft.

Cockrell-McIlroy Oil Co.'s No. 1 Allam, 330 ft. N and E of E½ NE, Sec. 127, Blk. 3, I.&G.N. Sur. ..... S.D. 3,330 ft; P.B. 3,317 ft; shot with 180 qts. 3,266-3,311 ft; swbd. 100 bbls. oil and 30 bbls. wtr.

Cockrell-McIlroy Oil Co.'s No. 1 Jackson, 330 ft. N and E of E 110 ac., SE, Sec. 138, Blk. 3, I.&G.N. Sur. ..... Drlg. 1,600 ft.

Continental Oil Co.'s No. 1 Combs & Worley, 330 ft. S and E, NE, Sec. 38, Blk. 3, I.&G.N. Sur. ..... Drlg. 2,320 ft.

Continental Oil Co.'s No. 1 Brown, 330 ft. S and W, Sec. 115, Blk. 3, I.&G.N. Sur. ..... Rigging up.

Danciger O. & R. Co.'s No. 2 Bradford, C SW NE, Sec. 148, Blk. B-2, H.&G.N. Sur. ..... S.D. 2,311 ft.

Danciger O. & R. Co.'s No. 3 Arnold, 330 ft. N and E, SE, Sec. 149, Blk. 3, I.&G.N. Sur. ..... Rig.

Danciger O. & R. Co.'s No. 1 McLaughlin, 330 ft. S and E, NW, Sec. 33, Blk. B-2, H.&G.N. Sur. ..... Spudding.

Danciger O. & R. Co.'s No. 1 Catlin et al, 175 ft. S, 300 ft. E of N 71 ac. of E 231 ac., Sec. 57, Blk. 3, I.&G.N. Sur. ..... T.D. 3,105 ft; 200 ft. oil in hole; T.P. 3,090-3,105 ft.

Danciger O. & R. Co.'s No. 5 Morse, 330 ft. N and E, SW SW NW, Sec. 1, Blk. 26, H.&G.N.R.R. Sur. ..... S.D. 2,575 ft.; swbng. 30 bbls. oil per day 2,545-60 ft; may deepen.

Dye & Gillette's No. 1 McConnell, 330 ft. N and W, W½ SE, Sec. 187, Blk. 3, I.&G.N. Sur. ..... S.D. 870 ft.

Empire G. & F. Co.'s No. 1 Crow, 875 ft. N and W, NE, Sec. 137, Blk. 3, I.&G.N. Sur. ..... Fishing 2,975 ft.

Empire G. & F. Co.'s No. 1 Sailor, 330 ft. S and W, NE, Sec. 138, Blk. 3, I.&G.N. Sur. ..... T.D. 3,237 ft; swbd. 350 bbls. first 18 hrs.

Dick Graham's No. 1 Sullivan, 792 ft. N and W, Sec. 136, Blk. 3, I.&G.N. Sur. ..... Drlg. 1,100 ft.

Jewell Oil Co.'s No. 1 Harrah, 330 ft. N and W, of W 40 ac., S 120 ac., E 240 ac., Sec. 163, Blk. 3, I.&G.N. Sur. ..... S.O. 3,185 ft.; T.D. 3,325 ft.; P.B. 3,295 ft.; shot 140 qts. from 3,261-95 ft.; 1,000 ft. oil in hole; T.P. 3,260-70 ft; C.O.

Jean Pet. Co.'s No. 1 Furneaux Bros., 330 ft. N and W cor. SE, Sec. 200, Blk. B-2, H.&T.N. Sur. ..... S.D. 2,283 ft.

Magnolia Pet. Co.'s No. 1 Cubine, 330 ft. N and W, NE, Sec. 36, Blk. 25, H.&G.N.R.R. Sur. ..... 9,000,000 ft. gas 2,325-35 ft.; S.D. 2,775 ft.

Magnolia Pet. Co.'s No. 1 Sailor, 990 ft. S, 330 ft. W, E½ NE, Sec. 133, Blk. 3, I.&G.N. Sur. ..... Drlg. 2,630 ft.

Magnolia Pet. Co.'s No. 2 Sailor, 330 ft. S and W, E½ NE, Sec. 138, Blk. 3, I.&G.N. Sur. ..... Cellar.

Midwest Explin. Co.'s No. 1 Cobb, 1,320 ft. W, 400 ft. S, NW, Sec. 165, Blk. 3, I.&G.N. Sur. ..... Drlg. 825 ft.

Midwest Explin. Co. et al's No. 1 Waggoner, 1,320 ft. W, 330 ft. N, Sec. 173, Blk. 3, I.&G.N. Sur. ..... Drlg. 3,010 ft.

Nelson et al's No. 1 Crews, 330 ft. S and E, NW, Sec. 12, Blk. 25, H.&G.N. Sur. ..... 3,500,000 ft. gas 2,295 ft; drlg. 2,600 ft.

Operators R. & P. Co.'s No. 1 Arnold, 330 ft. S and E, E½ NE, Sec. 149, Blk. 3, I.&G.N. Sur. ..... Location.

Saulsbury et al's No. 1 Sheridan, 330 ft. S and E, W½ NE, Sec. 134, Blk. B-2, H.&G.N. Sur. ..... S.G. 2,805-15 ft.; S.O. 2,835-45 ft; S.D. 3,095 ft; swbng. 35 bbls. oil per day.

W. A. Scott's No. 1 Cobb, 330 ft. S, 425 ft. W, N½ SE, Sec. 184, Blk. 3, I.&G.N. Sur. ... S.D. 2,270 ft.
Shamrock O. & G. Co.'s No. 1 Reynolds, 330 ft. N and E, SE SE, Sec. 84, Blk. 3, I.&G.N. Sur. ... Cellar.
Smith's No. 1 Morse, 200 ft. S, 330 ft. W, Sec. 6, Blk. 26, H.&G.N. Sur. ... 3,000,000 ft. gas 2,150-70 ft; drlg. 2,788 ft.
Smith & McDaniels' No. 1 Chapman, 990 ft. N and E, SW, Sec. 52, Blk. 25, H.&G.N. Sur. ... Drlg. 2,510 ft.
Sullivan et al's No. 1 Morse, 150 ft. W, 330 ft. S, N½ SW, Sec. 16, Blk. A-9, H.&G.N. Sur. ... Driving 12½-in. csg. 200 ft.
Southern Explin. Co.'s No. 2 Vaughn, 330 ft. S and E, SW, Sec. 138, Blk. 3, I.&G.N. Sur. ... Rigging up.
The Texas Co.'s No. 2 Brown, 170 ft. N, 330 ft. E, NW, Sec. 137, Blk. 3, I.&G.N. Sur. ... Drlg. 1,780 ft.
Tedesco Oil Co. et al's No. 1 Morse, 330 ft. N and W, NE SW, Sec. 1, Blk. 26, H.&G.N. Sur. ... Drlg. 2,310 ft.

HUTCHINSON COUNTY

Dixon Creek Oil Co.'s No. 1 Johnson Bros., 330 ft. N and W, of E 60 ac. of NW 100 ac., Sec. 1, Blk. X03, H.&O.B. Sur. ... Rig.
Great Plains O. & G. Co.'s No. 1 Sanford, C of S 160 ac. of N 320 ac., Sec. 87, Blk. 46, H.&T.C. Sur. ... Fishing 480 ft.
Holmes et al's No. 3 Quinn, 330 ft. S and W, Sec. 7, Blk. 9, I.&G.N. Sur. ... Drlg. 2,135 ft.
Huber & Co.'s No. 1 Christian, 330 ft. E, 990 ft. N, SW Sec. 33, Blk. Y, A.&B. Sur. ... Drlg. 2,840 ft.
Huber Prod. Co.'s No. 1 Johnson Bros., 330 ft. N and E, E½ NW, Sec. 30, Blk. Y, A.&B. Sur. ... Location.
Huber Prod. Co.'s No. 1 Johnson Bros., (Pure), 330 ft. S and E, of E 240 ac., Sec. 29, Blk. Y, A.&B. Sur. ... Location.
Phillips Pet. Co.'s No. 1 Johnson-Trammell, 930 ft. N, 330 ft. W, SE cor. W½, Sec. 38, Blk. Y ... T.D. 3,250 ft; testing.
Phillips Pet. Co.'s No. 1 Herring, 330 ft. N and E, W½ Sec. 7, Blk. X02, H.&O.B. Sur. ... Drlg. 1,940 ft.
Phillips Pet. Co.'s No. 1 Pease, 330 ft. S and E, Sec. 9½, Z. E. Collier Sur. ... Fishing 945 ft.
Sinclair O. & G. Co.'s No. 1 Johnson Bros., 330 ft. N and E, NW, Sec. 32, Blk. Y, A.&B. Sur. ... S.G. 2,230-54 ft; S.D. 2,905 ft; 39,000,000 ft. gas 2,340 ft.
Skelly Oil Co.'s No. 1 Johnson Bros., 660 ft. S and W, SE, Sec. 30, Blk. Y, A.&B. Sur. ... S.O. 3,065 ft. and 3,108-10 ft.; S.D. 3,110 ft.
Spurlock et al's No. 1-A Christian, 440 ft. S, 330 ft. W, NE cor. SE SE, Sec. 33, Blk. Y ... 60,000,000 ft. gas; drlg. 3,185 ft.
Stansylvania Oil Co.'s No. 1 Whittenburg, 330 ft. S and W, Sec. 129, Blk. Z, E.L.&R.R. Sur. ... Drlg. 500 ft.

LIPSCOMB COUNTY

Brown et al's No. 1 Box T Ranch, SW NE, Sec. 612, H.&T.C. Sur. ... S.G. 3,760 ft.; S.D. 4,142 ft.
Okla. Public Service Co.'s No. 1 C. W. Jones, NE SW, Sec. 100, H.&T.C. Sur. ... S.D. 4,954 ft.

LUBBOCK COUNTY

Center Oil Co.'s No. 1 Bowles Ranch ... Small S.O. 1,133-40 ft.; S.D. 4,167 ft.

MOORE COUNTY

Delmar Oil Co.'s No. 1 Jones, 990 ft. E, 330 ft. N, NW, Sec. 171, Blk. 3-T, T.&N.O. Sur. ... Fishing 3,010 ft.
Gulf Prod. Co.'s No. 1 Kilgore, C SW, Sec. 22, Blk. P.Mc., E.L.R.R. Sur. ... Gas estimated 15,000,000 ft. 3,050-60 ft.; T.D. 3,645 ft.; to complete as gasser.
Shamrock O. & G. Co.'s No. 1 Shory, 330 ft. N and W, NE. Sec. 187, Blk. 3-T, T.&N.O. Sur. ... 35,000,000 ft. gas 2,830-3,050 ft.; S.O. 3,472 ft.; spraying 50 bbls. per day from 3,498-3,503 ft.; T. D. 3,533 ft.; P.B. 3,519 ft.; shot with 50 qts. from 3,495-3,519 ft.; C.O.
Texas Interstate P. L. Co.'s No. 1 Zotness, C NW, Sec. 55, Blk. 6-T, T.&N.O. Sur. ... T.D. 2,634 ft; P.B. 2,615 ft; 25,000,000 ft. gas 2,335-2,600 ft.
Texas P. L. Co.'s No. 1 Sneed, Jr., C NE, Sec. 46, Blk. 6-T, T.&N.O. Sur ... Drlg. 2,550 ft.
Texas Interstate P. L. Co.'s No. 1 Sneed, Jr., C NE, Sec. 48, Blk. 6-T, T.&N.O. Sur. ... Location.

MOTLEY COUNTY

Matador Oil Corp.'s No. 1 Owens, C NE, Sec. 10, Blk. G, B.&B. Sur. ... S.D. 580 ft.

POTTER COUNTY

Marshall Spivey's No. 1 Bivins, C SW, Sec. 39, Blk. M-20, G.&M. Sur. ... **Fishing 2,000 ft.**
Canadian River Gas Co.'s No. 1 McBride estate "A," 4,950 ft. S, 330 ft. W, E½ S½, Sec. 98, Blk. 46, H.& T.C. Sur. ... **Drlg. 250 ft.**
Texas Interstate P. L. Co.'s No. 1 Masterson, C S 160 ac., Sec. 85, Blk. 3, G.&M. Sur. ... T.D. 1,420 ft; U.R. 12-in. csg.

RANDALL COUNTY

W. A. Patterson's No. 1 Palo Duro, Sec. 60, Blk. K-14 ... S.D. 1,250 ft.

ROBERTS COUNTY

Big Bend Oil Co.'s No. 1 Ledrick, Sec. 7, Blk. A-5 ... Shot 10 qts. 5,270-93 ft.; S.O. 5,288 ft.; S.D. 5,992 ft.

WHEELER COUNTY

Davis et al's No. 1 Stuckey, C NE SW, Sec. 92, Blk. 17, H.&G.N. Sur. ... Location.
Johnson et al's No. 2 Hicks, 890 ft. W, 990 ft. S, Sec. 49, Blk. 17, H.&G.N. Sur. ... Drlg. 1,860 ft; 6,000,000 ft. gas 1,810-60 ft.
Lone Star Gas Co.'s No. 1 Krizan, C SW SW, Sec. 101, Blk. 23, H.&G.N. Sur. ... Location.
Magnolia Pet. Co.'s No. 2 Worley, 330 ft. N and W, NE, Sec. 39, Blk. 24, H.&G.N. Sur. ... Spudding.
McGee et al's No. 1 Jolly, C NE, Sec. 15, Blk. A-8, H. &G.N. Sur. ... T.D. 2,030 ft; running 6⅝-in. csg.
Murchison & Fain's No. 2 Grogan, C SW SE, Sec. 73, Blk. 23, H.&G.N. Sur. ... **Drlg. 430 ft.**
Murchison & Fain's No. 1 Hanes, C NW NW, Sec. 31, Blk. 17, H.&G.N. Sur. ... Rig.
Wischkamper et al's No. 1 Kiser, 330 ft. N and E of SW, Sec. 33, Blk. 17, H.&G.N. Sur. ... S.D. 1,510 ft.
Woodley et al's No. 1 Sloss & Admire, 660 ft. N, 330 ft. E, Sec. 47, Blk. 13, H.&G.N. Sur. ... S.D. 1,150 ft.
Vollmert's No. 1 Porter, 330 ft. S and E, NE, Sec. 15, Blk. 27, H.&G.N. Sur. ... Location.

WILDCAT OPERATIONS IN WEST TEXAS

(Continued from Page 70)

Cranfill Bros. et al's No. 1 J. F. Muir, 2,310 ft. from W and 330 ft. from N, Sec. 23, Blk. 27, Public School Land ... Location.
C. C. Duffey's No. 1-C Cowden Bros. & Co., 2,640 ft. from S and 3,960 ft. from W of Juan Cordona Sur. ... Drlg. 1,675 ft.
Sun Oil Co.'s No. 1 First National Bank, C Sec. 6, J. H. Gibson Sur. ... Drlg. 3,230 ft.

CROCKETT COUNTY

Dixie Oil Co. and Amerada's No. 2 Powell, 258 ft. N and 2,349 ft. W of NE cor. of Sec. 42, T.C. Ry., but located in Sec. 52, Blk. BB ... Building rig.
Doleman & Moore's No. 1 Perner, 3,135 ft. from N and 1,485 ft. from E of Sec. 36, Blk. 2, I.&G.N. Sur. ... Spudded and shut down.
Magnolia Pet. Co.'s No. 1 Hoover, 2,310 ft. from N and 330 ft. from E of Sec. 12, Blk. 1, G.C.&S.F.R.R. Sur. ... Drlg. 6,000 ft.
Magnolia Pet. Co.'s No. 2 Hoover, 2,310 ft. from S and 335 ft. from E of Sec. 2, Blk. FF, B.&B. Sur. ... Drlg. 300 ft.
G. Schaul's No. 1 Bouscour Est., 330 ft. N and 2,310 ft. from W of Sec. 27, Blk. HH, G.C.&S.F. Sur. ... Rig up and shut down.

CULBERSON COUNTY

Grisham & Hunter's No. 2 Garren, 2,475 ft. from S and 1,566 ft. from E, Sec. 20, Blk. 89, Public School Land ... Shut down 1,520 ft.
Kornrumpf et al's No. 1 Garren, 330 ft. S and W, Sec. 15, Blk. 79, Public School Land ... Shut down 850 ft.

ECTOR COUNTY

C. P. Davis et al's No. 1 Hendricks, C SW Sec. 46, Blk. 42, Twp. 2s, T.&P.R.R. Sur. ... Shut down 4,012 ft.
Humble Oil & Ref. Co.'s No. 1 Jones, 330 ft. from S and 423 ft. from W of Sec. 6, Blk. 44, T.&P. Sur. ... Fishing 3,685 ft.
Independent Oil & Gas Co.'s No. 1 Eldson, 1,250 ft. S and 2,144 ft. E of NW cor. Sec. 6, Blk. 44, Twp. 3s, T.&P. Sur. ... Shut down 3,800 ft.; 1,000 ft. oil in hole.
H. F. Wurtz' No. 1 E. A. Ibbetson et al, 330 ft. from N and E lines of NW, Sec. 16, Blk. 46, Twp. 3s, G.M.M.Br.&A. Sur. ... Shut down 2,375 ft.
T. P. Coal & Oil Co.'s No. 1 McKenzie, 1,650 ft. from S and 330 ft. from E of Sec. 282, Blk. 45, Twp. 2s, T.&P. Sur. ... Shut down 3,870 ft.; shot 210 qts. 3,720-75 ft.; filled 1,000 ft.; swabbed 45 bbls. in 7 hrs.; swabbing dry.
R. R. Penn et al's No. 1 Goodman et al, 2,640 ft. N and 330 ft. W of SE cor. Sec. 27, Blk. 44, T.&P.R.R. Sur. ... Shut down 4,398 ft.
Skelly Oil Co. and Republic Prod. Co.'s No. 1 McKenzie, 990 ft. from S line and 330 ft. from E line of Sec. 28, Blk. 45, Twp. 2s, T.&P. Sur. ... Shut down 3,750 ft.; flowed 110 bbls. on July 12; shut in for storage.
Skelly Oil Co. et al's No. 1-C University, 2,310 ft. from N and W of Sec. 2, Blk. 35 ... Drlg. 2,550 ft.
Sunray Oil Co. et al's No. 1 Jones, 2,330 ft. from N and 440 ft. from E of Sec. 6, Blk. 44, Twp. 3s, T.&P. Sur. ... Shut down 3,823 ft.

EL PASO COUNTY

Lane-The Texas Company's No. 1 Malone, 2,110 ft. from SW and NW of Section 46, J. M. Day Sur. ... Shut down 3,089 ft.

FISHER COUNTY

Cranfill & Reynolds' No. 2 Flannigan, 330 ft. from S and E of W half of Sec. 200, B.B.B.&C.R.R. Sur. ... Drlg. 3,095 ft.; 2,500 ft. oil in hole from 3,090-95 ft.
Cranfill & Reynolds' No. 1 Willingham, 330 ft. from S and E of Sec. 207, B.B.B.&C. Sur. ... Location.
Mid-West's No. 1 Decker, 330 ft. from S and W of W 80 ac. of N 160 ac., Sec. 8, Richardson Sur. ... Total depth 3,250 ft.; 1,200 ft. oil in hole from 3,236-50 ft.
The Texas Company's No. 1-A Teagarden, 150 ft. from S and 420 ft. from E of Sec. 8, Richardson Sur. ... Set 6⅝-in. casing 3,190 ft.

GARZA COUNTY

Pandem Oil Corp.'s No. 1 Justice, 330 ft. from S and W of Sec. 12, Blk. 4, H.&G.N. Sur. ... Spudded and shut down.
Richard's No. 1 Stoker, 330 ft. from N and W Sec. 2, Blk. 2, G.H.&H. Sur. ... Cleaning out 3,044 ft.

GLASSCOCK COUNTY

Timberlake & Snyder's No. 1 Meek, 2,310 ft. W and 1,600 ft. N of SE cor. Sec. 7, Blk. 34, Twp. 3s, T.&P. Sur. ... Total depth 2,956 ft.; fishing casing.
World Oil Co.'s No. 3-C McDowell, 2,310 ft. from S and W of NE cor. Sec. 21, Blk. 34, Twp. 2s, T.&P. Sur. ... Shut down 680 ft.

HOWARD COUNTY

Cosden Oil Co.'s No. 6 Roberts-A, 200 ft. N and E of SW cor. Sec. 129, Blk. 29, W.&N.W.R.R. Sur. ... Sulphur water 1,433-46 ft.; shut down 1,456 ft.
Greene O. & R. Co. et al's No. 1 Drumon, 330 ft. from N and W of E half of NE Sec. 14, Blk. 30, Twp. 1s, T.&P. Sur. ... Rig up.
Merriwether's No. 1 Smith, 150 ft. from S, 2,490 ft. from W Sec. 45, Blk. 33 ... Drlg. 3,260 ft.; 2,000 ft. water in hole.
Moody Oil Corp.'s No. 23-B Roberts, 990 ft. from N and W of Sec. 137, Blk. 29 ... Shut down 261 ft.

HUDSPETH COUNTY

Western States Oil Co.'s No. 1 Gardner & Moseley, NE NW, Sec. 12, Blk. 18 ... Fishing 3,155 ft.
Williams & Williams Drlg. Co.'s No. 1 Noelke, 200 ft. from N and 1,020 ft. from E of Sec. 8, City of San Antonio Sur. ... Machine.

IRION COUNTY

Bristow et al's No. 1 Nutt, 180 ft. from NE of SW of NW Sec. 6, Gonzales Co. School Lands ... Machine.
Crawford Oil Co.'s No. 1 Williams, 450 ft. from N, 150 ft. from W, Subd. 8 ... Shut down 1,105 ft.
Cromwell et al's No. 1 Tankersley, 150 ft. from N and 210 ft. from W of E half of Sec. 1,330, G.C.&S.F. Sur. ... Drlg. 1,250 ft.
Straughn & Texannati Oil Co.'s No. 3 Nutt, 804 ft. from N and 150 ft. from W of NE cor. of NW, Blk. 6, Gonzales Co. School Land ... Shut down 1,445 ft.; testing oil sand 1,440-45 ft.; filled 600 ft. first hour.
Straughn & Texannati Oil Co.'s No. 1 Tankersley, 150 ft. from S and 750 ft. from W of Sec. 4, Gonzales Co. School Lands ... Location.
P. H. Williams' No. 1 Ash, C of Sec. 20, Washington County ... Show oil 7,931 ft.; shut down 8,890 ft.; may drill deeper.
Webb et al's No. 1 Nutt, 150 ft. from S and 116 ft. from W of Blk. 5, Gonzales Co. School Land ... Location.

JONES COUNTY

Gibson & Johnson's No. 1 Hudspeth, 1,125 ft. from N and 483 ft. from E of Sec. 22, Edward Miles Sur. ... 600 ft. oil and water in hole; top pay 2,542 ft.; drlg. 2,650 ft.
Pope et al's No. 1 Swann, 2,023 ft. from S and 400 ft. from E of I. Miley Sur. No. 281 ... Spudded and shut down.

LOVING COUNTY

Dixie and Phillips Pet.'s No. 1 Johnson, 1,320 ft. from N and E of Sec. 38, Blk. 54, Twp. 2s, T.&P. Sur. ... Shut down 4,590 ft.
Eppenauer et al's No. 1 Allen, 2,310 ft. from NE and NW lines, Sec. 90, Blk. 1, W.&N.W. Sur. ... Spudded and shut down.
Lockhart & Co.'s No. 3 Bowen & Wells, 330 ft. from NE and SE of Sec. 92, Blk. 1, W.&N.W. Sur. ... Shut down 3,383 ft.
Hadlock et al's No. 2 Russell, 1,650 ft. SW of NE line, 2,310 ft. NW of SE line, Sec. 80, Blk. 1, W.&N.W. R.R. Sur. ... Total depth 4,360 ft.; made 47-bbl. head after standing 6 days.
Henshaw et al's No. 1 Reagan & McElvain, 990 ft. from SE and 330 ft. from SW Sec. 84, Blk. 1, W.&N.W. Sur. ... Drlg. 906 ft.
Lockhart & Co.'s No. 2 fee, 676 ft. S, 330 ft. W, Sec. 91, Blk. 1, W.&N.W. Sur. ... Spudded 140 ft.; shut down.
Lockhart & Co.'s No. 3 Hubbard, 1,650 ft. from NE line, 330 ft. NW line of Sec. 83, Blk. 33, H.&T.C.R.R. Sur. ... Rigged up and shut down.
Lockhart's No. 2 Wheat & Ramsey, 440 ft. from NE and 880 ft. from NW, Sec. 82, Blk. 1, W.&N.W. Sur. ... Drlg. 3,930 ft.
Miller et al's No. 1 Chapman, 225 ft. from NW and 285 ft. from SW line, Sec. 71, Blk. 1, W.&N.W. Sur. ... Drlg. 2,450 ft.
Rush et al's No. 1 Wheat, 1,650 ft. from NW and 330 ft. from SW of Sec. 85, Blk. 1, W.&N.W. Sur. ... Shut down 2,474 ft.
California Co.'s No. 2 Reagan & McElvain, 440 ft. from NW and SW Sec. 84, Blk. 1, W.&N.W. Sur. ... Drlg. 3,305 ft.
California Co.'s No. 4 Reagan & McElvain, 330 ft. from NE and 1,650 ft. from NW. Sec. 84, Blk. 1, W.&N.W. ... Drlg. 1,360 ft.
Lee O. White et al's No. 1 Russell et al, 320 ft. from NW and 2,200 ft. from SW Sec. 80, Blk. 1, W.&N.W. ... Drlg. 1,680 ft.

LYNN COUNTY

George McCamey's No. 1 Edwards, 165 ft. N and E, Sec. 5, Blk. 2, L.S.&W. Sur. ... Shut down 5,280 ft.

MENARD COUNTY

Barnett et al's No. 3 Callan City Co., 300 ft. from S and W Sec. 1, B.S.&F. Sur. — Show oil 709-11 ft.; shut down 1,270 ft.

Panhandle Ref. Co.'s No. 2 Eckhart, 1,820 ft. from W and 1,320 ft. from S of Sec. 10, Blk. 2, T.W.N.G. Sur. — 500,000 ft. gas with show oil 2,945 ft.; shut down 3,200 ft.

Priest's No. 1 Sorrel, 1,000 ft. from E and 200 ft. from S cor. Sec. 132, E.L.R.R. Sur. — Fishing tools 2,415 ft.

MITCHELL COUNTY

Morrison et al's No. 2 Morrison, 2,300 ft. from N and 660 ft. from E of Sec. 31, Blk. 28, Twp. 1n, T.&P. R.R. Sur. — Total depth 3,112 ft.; top pay 3,038 ft.; 1,000 ft. oil in hole; swabbing 40 bbls. in 24 hrs.

Morrison et al's No. 1 Poe et al, 660 ft. S and 1,980 ft. W parallel to section lines of NE cor. Sec. 8, Blk. 27, T.&P. Sur. — Spudded 10 ft. and shut down.

PECOS COUNTY

Barnes et al's No. 1 Sanford, 160 ft. from NW and 157 ft. from SW of Sec. 55, Blk. 10, H.&G.N. Sur. — Shut down 777 ft.

Curry & Eakin's No. 1 Pecos Valley Oil Co., 1,050 ft. from SE and 1,470 ft. from SW, Sec. 36, Blk. 3, H.&T.C. Sur. — Shut down 790 ft.

Dittman's No. 1 Jackson, 2,310 ft. from NE and 330 ft. from NW Sec. 28, Blk. 3, H.&T.C. — Location.

Dittman's No. 1 Eaton, 2,310 ft. from SW and NW Sec. 35, Blk. 3, H.&T.C. — Location.

Dittman's No. 2 Eaton, 990 ft. from SW and 330 ft. from SE Sec. 35, Blk. 3, H.&T.C. — Location.

Dittman's No. 1 Eaton, 330 ft. from NE and SE Sec. 37, Blk. 3, H.&T.C. — Location.

G. A. Henshaw, Jr., Inc.'s No. 1 University, 1,650 ft. from S and 990 ft. from E, Sec. 32, Blk. 16 — Drlg. 1,275 ft.

Humble Oil & Ref. Co.'s No. 1 Kokernot, 1,320 ft. from N line and 1,467 ft. from W line of Sec. 227, Blk. 10, G.H.&S.A. Sur. — Drlg. 2,730 ft.

Humble Oil & Ref. Co.'s No. 1-B Thoman, 1,608 ft. from N and 4,062 ft. from E of Sec. 98, Blk. OW, G.C.&S.F. Sur. — Drlg. 133 ft.

Independent O. & G. Co.'s No. 4 McDonald, 115 ft. from N and 2,485 ft. from E, Sec. 46, Blk. 12, H.&G.N. — Shut down 1,720 ft.; half full sulphur water.

Magnolia Pet. Co.'s No. 1 Byrne, 2,490 ft. from SE and SW, Sec. 54, Blk. 10, H.&G.N. Sur. — Drlg. 886 ft.

McCurdy & Brown's No. 1 Tippett, 1,150 ft. from S
McCurdy & Brown's No. 2 Tippett, 150 ft. from N and W of SE Sec. 40, Blk. 194, G.C.&S.F. — Location.

Messenger et al's No. 2 Byrne, 2,490 ft. from NE and SE of Sec. 54, Blk. 10, H.&G.N. Sur. — Shut down 1,367 ft.; top pay 1,364 ft.; flowing 93 bbls. daily.

Messenger et al's No. 1 Butz, 1,830 ft. from NW and 1,170 ft. from SW, Sec. 54, Blk. 10, H.&G.N. Sur. — Shut down 740 ft.

J. R. Miller et al's No. 1 Bennett, 359 ft. W of CWL, Sec. 1, Blk. 119, G.C.&S.F. — **Shut down 1,700 ft.**

J. D. O'Mara's No. 1 Bennett, Sec. 593, 1,460 ft. from S, 150 ft. from E, G.C.&S.F. — Total depth 1,230 ft.; top pay 1,089 ft.; plugged back to 1,185 ft.; will drill deeper.

J. D. O'Mara's No. 1 Streety, C of Sec. 1, W. P. Howard Sur. — Underreaming 2,200 ft.

Oregon Oil Corp.'s No. 2 Yates, 150 ft. from S and W of Sec. 58, Blk. 1, I.&G.N. Sur. — Shut down 2,440 ft.

Perren Oil Co.'s No. 2 Eaton, C of E of W, Sec. 27, Blk. 3, H.&T.C. Sur. — Drlg. 1,560 ft.

Perren's No. 1 Jackson, 200 ft. from NW and SW of Sec. 28, Blk. 3, E.&T.C. Sur. — **Shut down 1,537 ft.**

Plymouth Oil Co.'s No. 1 Perry, 330 ft. from N and W Sec. 13, Blk. 194, G.C.&S.F. — Total depth 1,920 ft.; top pay 1,892 ft.; flowing 25 bbls. per day.

Plymouth Oil Co.'s No. 4 Perry, 300 ft. from N and 420 ft. from E, Sec. 14, Blk. 194, G.C.&S.F. Sur. — Cellar.

R. W. Porpus et al's No. 1 State Land, 330 ft. S and W lines of NE, Sec. 38, Blk. OW, T.C.R.R. Sur. — **Spudded and shut down.**

Pure Oil Co.'s No. 1 Harrison, 2,310 ft. from N and 330 ft. from W of Sec. 203, Blk. 3, T.&P. Sur. — **Shut down 1,260 ft.**

Riser & White's No. 1 Riser, 2,297 ft. from S and 997 ft. from E of Sec. 24, Blk. 12, H.&G.N. Sur. — **Shut down 90 ft.**

Sides & Cloyd's No. 2 Blackstone & Slaughter, C NW of Sec. 34, Blk. A-2, T.&C.R.R. Sur. — Drlg. 2,135 ft.; show gas 1,365 ft.; show oil 1,390 ft.

California Co.'s No. 1 Fromme, 330 ft. from NE and NW, Sec. 106, Blk. 10, H.&G.N. Sur. — Shut down 1,650 ft.

California Co. et al's No. 1 Thomas, 990 ft. from NW and SW, Sec. 31, Blk. 34, H.&T.C. Sur. — Location.

The Texas Company's No. 1 Wright, 660 ft. S and E of NW cor., Sec. 9, Blk. 131, T.&St.L. Sur. — Shut down 3,504 ft.

Warner's No. 1 Webb, 2,550 ft. from NW and 6,100 ft. from NE of Sec. 211, Abst. 756, C. McGinley Sur. — Rigged up and shut down.

PRESIDIO COUNTY

L. C. Brite's No. 4 Brite, 271 ft. from N and 1,188 ft. from E lines of Sec. 245, Blk. 4 — Shut down 2,630 ft.

REAGAN COUNTY

Big Lake Oil Co.'s No. 4-C University, 1,120 ft. from N and 1,096 ft. from E of Sec. 1, Blk. 2 — Total depth 8,220 ft.

Big Lake Oil Co.'s No. 5-C University, 625 ft. from S and 280 ft. from W of Sec. 25, Blk. 9 — Drlg. 2,610 ft.

Texon O. & L. Co.'s No. 4-B University, 1,120 ft. from N and W of Sec. 36, Blk. 9 — Location.

REEVES COUNTY

H. T. Hansford's No. 1 Williams, 150 ft. from S and W Sec. 17, Blk. 6, H.&G.N. Sur. — Shut down 380 ft.

Black & Fink's No. 1 Brooks, 1,980 ft. N and 660 ft. W Sec. 16, Blk. 50 — Shut down 1,860 ft.; show oil 1,820 ft.; cleaning out after two shots; filled up 200 ft. with oil.

Salsbury & Gregory's No. 1 Young Bell, 1,170 ft. from N and 330 ft. from E of Sec. 7, Blk. 5, H.&G.N. — Shut down 260 ft.

Lee O. White et al's No. 1 Hershersor, 330 ft. from N and W lines of Sec. 5, Blk. 51, Twp. 10, T.&P. Sur. — Drlg. 4,245 ft.

California Co.'s No. 1 Kloh & Rumsey, 1,650 ft. from S and E of Sec. 13, Blk. 54, Twp. 4, T.&P. Sur. — Shut down 3,604 ft.

RUNNELS COUNTY

Dutton et al's No. 1 Dean, 5,475 ft. from NE and 1,048 ft. from NW in J. Heil Sur. No. 419 — Show oil 2,308-95 ft.; gas pocket 2,303 ft.

Gibson & Johnson's No. 2 Serratt, 2,310 ft. from S and 1,650 ft. from E of Sec. 150, E.T.R.R. Sur. — Derrick.

George W. Boyce's No. 1 Lang, 2,310 ft. N, 6,900 ft. E, Sec. 262 — Show oil 2,028 ft.; shut down 2,643 ft.

SCHLEICHER COUNTY

Delmar Oil Co.'s No. 1 O'Harrow, C of NW Sec. 56, Blk. 1, G.H.&S.A.R.R. Sur. — Shut down 4,060 ft.

Interstate's No. 1 Whitten, 1,320 ft. from N and W, Sec. 35, Blk. LL, T.C.R.R. Sur. — Shot 5 qts. 6,327-36 ft.; 10 qts. 6,317-27 ft.; 10 qts. 6,312-22 ft.; 10 qts. 8,322-32 ft.; no increase in oil; total depth 6,880 ft.

Teas & Gant's No. 1 Allison, 1,320 ft. N and E of SW cor. of Sec. 37, Blk. K, G.H.&S.A.R.R. Sur. — Drlg. 3,225 ft.

Weaner et al's No. 1 Nicks, 2,310 ft. from N and 2,362 ft. from E of Sec. 77, Blk. LL, T.C.R.R. Sur. — Shut down 750 ft.

Westyde et al's No. 1 Meador, 1,320 ft. from S and E of Sec. 661, G.C.&S.F. Sur. — Location.

George Wilson's No. 1 Page, Sec. 40, Blk. L, 1,290 ft. from N, 1,470 ft. from W, G.H.&S.A.R.R. Sur. — Fishing 4,912 ft.

SCURRY COUNTY

Byrd & Harmon's No. 1 Murphy, Jr., 320 ft. from N and E of Sec. 114, Blk. 97, E.&T.C. Sur. — Shut down 3,437 ft.; testing.

Camp Spring Oil & Ref. Co.'s No. 3 Guinn, 1,300 ft. from S, 300 ft. from E, Sec. 12, Blk. 3, H.&T.C.R.R. Sur. — Shut down 4,372 ft.

Camp Spring Oil Co.'s No. 1 Strayhorn, 330 ft. from S and 1,980 ft. from W of Sec. 164, Blk. 3, H.&G.N. — Shut down 700 ft.

I. B. Mimms et al's No. 1 J. J. Koonsman, Sec. 216, Blk. 2, H.&T.C.R.R. Sur. — Spudded and shut down.

G. E. Dickman and R. B. Pender et al's No. 1 F. C. Davis, 1,000 ft. N and 1,770 ft. W of SE cor. of Sec. 275, Blk. 2, H.&T.C. Sur. — Shut down 4,925 ft.

Transcontinental Oil Co.'s No. 1 Peckham, 330 ft. from S and W of R. N. Miller Sur. — Shut down 3,396 ft.

SUTTON COUNTY

Independent Oil & Gas Co.'s No. 1 Wilson, Sec. 30, Blk. A, 1,650 ft. from N, 2,310 ft. from W — Location.

TAYLOR COUNTY

Clark et al's No. 1 Kendall, 250 ft. from N and W of farm in Willis Avery Sur. — Shut down 2,080 ft.

Eastland Oil Co.'s No. 1 Hunter, 1,574 ft. from E and 3,418 ft. from S of William R. Ellis Sur. — Drlg. 1,890 ft.

Gibson & Johnson's No. 1 Bingham, 330 ft. N and E of SW cor. their 270.8-acre tract, Sec. 31, Guadalupe County School Land — Swedging pipe 2,432 ft.

John B. Jameson's No. 1 Webb, 1,170 ft. S and W of NE cor. Sec. 46, Lunatic Asylum Land — Show oil 4,917 ft.; drlg. 6,078 ft.

Hucony Oil Co. et al's No. 1 Richie, C SE Sec. 10, Blk. A, S.P.R.R. Sur. — Shut down 1,080 ft.

Sanger et al's No. 1 City of Abilene, 330 ft. from S and 1,400 ft. from E of Sec. 66, Blind Asylum Lands — Rigging up.

TERRELL COUNTY

Big Bend Oil Co.'s No. 1 Bassett, C NW Sec. 155, Blk. D, M.-K.-T.R.R. Sur. — Shut down 2,180 ft.

Keck Pecos Trust Co.'s No. 1 Hamilton, C Sec. 6, Georgetown Ry. Sur. — Shut down 3,150 ft.

Miller Bros.' No. 1 Allison & Burke, C NW cor. Sec. 10, Blk. 176, T.&P. Sur. — Shut down 120 ft.

Mrs. J. B. McPhees' No. 1 Sam Belt, C Sec. 17, Blk. D-7, E.L.R.R. Sur. — Shut down 880 ft.; moved off machine.

Transcontinental Oil Co.'s No. 1 Goode, 2,152 ft. from E and 330 ft. from S, Sec. 26, Blk. 161, G.C.&S.F.R.R. Sur. — Shut down 5,229 ft.

Woodley & Jones' No. 1 Pankenham, C SE NW, Sec. 43, Blk. B-2, C.C.S.D.&N.G.R.R. Sur. — Shut down 640 ft.

TOM GREEN COUNTY

Belding & Dutton's No. 1 Nosworthy, 2,640 ft. from S and 587 ft. from E of John McNeese Sur. — Cleaning out 435 ft.

Cosden Oil Co.'s No. 1 William Anson, 2,310 ft. S, 330 ft. W of NE cor., Sec. 20, Blk. 24, H.T.C.R.R. Sur. — Location.

Ellis' No. 3 Lewis, 1,350 ft. S and 450 ft. E of SW cor. Jas. Webb Sur. 77, but in Albert Black Sur. 75 — Shut down 1,101 ft.

Fitzgerald & Taliaferro's No. 1 Bennett, C SW Sec. 1,628, E. H. Dinger Sur. — Plugged back to 2,405 ft. to straighten hole; shut down 2,447 ft.

Mintex Oil Co.'s No. 1 Campbell Est., 446 ft. from S and 630 ft. from W of Sec. 180, Dist. No. 11, S.P.R.R. Sur. — Drlg. 777 ft.

Phillips Pet. Corp.'s No. 1 Gulden, 1,250 ft. from N and 1,583 ft. W of Sec. 77, James Webb Sur. — **Drlg. 3,375 ft.**

E. W. Wiley et al's No. 1 Maier, 200 ft. from E, 110 ft. from N, Sec. 6, Blind Asylum Land — Show oil 418-20 ft.; total depth 632 ft.

UPTON COUNTY

Cordova Union Land Co.'s No. 1 fee, 330 ft. from S and E line of Sec. 1, Blk. 1, M.-K.-T.R.R. Sur. — Location.

VAL VERDE COUNTY

Atlantic Oil Prod. Co.'s No. 1 Reynolds & Miller, 330 ft. from NE and NW Sec. 15, Blk. 32, H.&T.C. — Drlg. 750 ft.

A. Bluhm's No. 1 Yoast, 1,760 ft. N, 600 ft. W of SE cor., Sec. 31, Blk. 3, I.&G.N. Sur. — Location.

Independent Operators' No. 1 Whitehead, SE SE, Sec. 30, Blk. 4, I.&G.N. Sur., elev. 1,175 ft. — Shut down 5,360 ft.

O. O. Owen's No. 1 Mills, Sec. 128, Blk. 1, I.&G.N. Sur., elev. 2,130 ft. — Drlg. 6,723 ft.

Phantom Oil Co.'s No. 1 Ingram, 175 ft. W of E line and 300 ft. N of S line, Sec. 33, Blk. D-8, E.L.&R.R. Sur. — Show oil 1,525 ft.; fishing 3,035 ft.

Valvert Oil Corp.'s No. 1 Bassett, C NE Sec. 47, Blk. Y — Shut down 4,009 ft.

WARD COUNTY

Bradford et al's No. 1 Murry, 1,782 ft. from NW and 2,157 ft. from SW, Sec. 11, Blk. 5, H.&T.C. Sur. — Shut down 1,140 ft.

Gulf Prod. Co.'s No. 5 Hutchings, 330 ft. from S and W Sec. 3, Blk. F, G.&M.M.B.&A. Sur. — Drlg. 1,330 ft., salt; top salt 1,265 ft.

Gulf Prod. Co.'s No. 3 Wristen Bros., 220 ft. NE of SW and 220 ft. SE of NW Sec. 18, Blk. 5, H.&T.C. Sur. — Show gas 1,960-70 ft.; filling up with sulphur water 2,520-77 ft.; salt water 2,545 ft.; plugged back to 2,477 ft.

Magnolia Pet. Co.'s No. 1 Sealy, 330 ft. from S and E of NE cor. Sec. 46, Blk. 2, G.&M.M.B.&A. Sur. — Fishing 566 ft.

R. F. Owens' No. 1 Johnson, 100 ft. from NE and 1,100 ft. from SE of Sec. 8, Blk. 33, H.&T.C.R.R. Sur. — Drlg. 1,200 ft.

Penn and Atlantic's No. 1-B Pecos Mercantile Co., 990 ft. from NW and 2,310 ft. from NE, Sec. 16, Blk. 34, H.&T.C. Sur. — Drlg. 2,260 ft.

Richardson et al's No. 4 O'Brien et al, 330 ft. from N and 2,340 ft. from W, Sec. 5, Blk. F, G.M.M.B.&A. — Drlg. 670 ft.

Tex-Oil Prod. Co.'s No. 1 Redman, 1,980 ft. NE of SW line and 1,980 ft. SE of NW line, Sec. 152, Blk. 34, H.&T.C.R.R. Sur. — Shut down 5,077 ft.; show oil 5,070 ft.; shot 140 qts. from 5,047-77 ft.; no results.

Shipley et al's No. 5 Hayzlett, assume common line Secs. 16 and 17 is N and S, 220 ft. S and 1,910 ft. W, Sec. 17, Blk. 5 — Standard rig.

Shipley et al's No. 1 Monroe, 330 ft. SE SW Sec. 3, Blk. 1 — Drlg. 1,912 ft.

J. E. Smith's No. 1 Clement, 152 ft. SW of NE line and 153 ft. SE of NW line, Lot 7, Sec. 7, Blk. 32, H.&T.C.R.R. Sur. — Shut down 2,220 ft.; estimated 1,000,000 ft. gas; flowed 8 bbls. oil and 30 bbls. water per day.

T. P. Coal & Oil Co.'s No. 1 Barker, 330 ft. from SW and NW of Sec. 27, Blk. B-29, Public School Land — Location.

WINKLER COUNTY

Atlantic & Maxwell's No. 1 Daugherty, 1,650 ft. from S and 2,310 ft. from E, Sec. 16, Blk. 74, Public School Land — Drlg. 2,756 ft.; show oil and gas 2,680 ft.

Magnolia Pet. Co.'s No. 3 Scarborough, 1,650 ft. from N and 990 ft. from W of Sec. 1, Blk. 77, Public School Land — Rig up.

A. W. Phillips' No. 2 Brown et al, 2,000 ft. S and W of NE, Sec. 4, Blk. B-5, Public School Land — Shut down 3,120 ft.

Liner Drlg. Co.'s No. 1 Campbell, 330 ft. from N and E cor., Sec. 2, Blk. B-5 — Drlg. 4,315 ft.

Shell and The Texas Company's No. 1-B Cowden, 600 ft. from S and W of Sec. 39, Blk. B-5, Public School Land — Shut down 3,116 ft.; top pay 2,585 ft.; flowing 124 bbls. per day, 40 per cent water.

Simms Oil Co.'s No. 1 Sealy, C of SE, Sec. 49, Blk. F, G.M.M.B.&A. Sur. — Shut down 2,757 ft.

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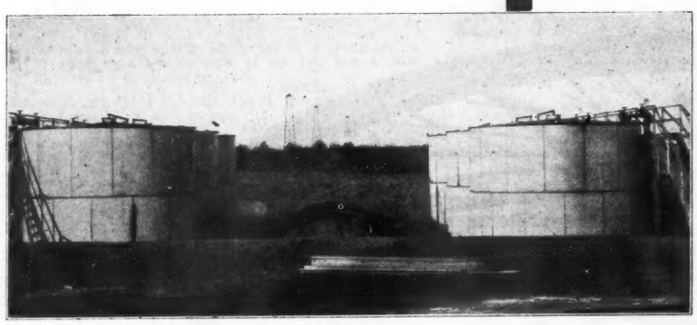

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MALONEY ALONE

NEW LOCATIONS IN TEXAS PANHANDLE AND NORTH AND WEST TEXAS FIELDS

TEXAS PANHANDLE
For the Week Ending August 6

Carson County

Empire Gas & Fuel Co.'s No. 27 S. B. Burnett, at the center of the NW of Section 76, Block 5, I.&G.N. North American Oil & Gas Co.'s No. 1 S. B. Burnett-Section 98, at the center of the SE of Section 98, Block 4, I.&G.N.

Gray County

Dye & Gillette's No. 1 L. C. McConnell, 330 feet south and east of the NW cor. of the W half of the SE of Section 187, Block 3, I.&G.N.

Hutchinson County

Stansylvania Oil Co.'s No. 1 J. A. Whittenburg, 330 feet north and east of the SW cor. of Section 129, Block Z, E.T.&R.R. Texas Interstate Pipe Line Co.'s No. 1 J. Q. Bost-Section 14, 702 feet south and 971 feet east of the NW cor. of Section 14, Block Y2, T.T.R.R.

Potter County

Texas Interstate Pipe Line Co.'s No. 1 R. B. Masterson-Section 85, at the center of the south 160 acres of Section 85, Block G.&M. 3, G.&M.

NORTH CENTRAL AND WEST TEXAS
For the Week Ending August 6

Archer County

J. Menton and others' No. 1 W. M. Coleman, 1,020 feet south and 150 feet east of the NW cor. of Lot 1, Section 81, A.T.N.C.L. Carey & Carey.'s No. 1 Falls County School Land, 150 feet north and west of the SE cor. of Section 4, Falls County School Land, A-130. F. P. Cullum's No. 4 Falls County School Land (Ellis), 150 feet north and west of the SE cor. of Section 10, Falls County School Land, A-130. F. P. Cullum's No. 1 W. J. Logan, at the center of the N half of the NE of Section 23, J. M. Taylor Survey A-651. Fain-McGaha Oil Corp.'s No. 2 W. H. Portwood-D, 816 feet south and 783 feet east of the NW cor. of the NE of Section 1,579, T.E.&L. Heydrick & Hickman's No. 3 Abercrombie & Taylor, 150 feet south and 450 feet east of the NW cor. of Section 40, Club Ranch Subdivision. F. P. Hynes' No. 1 J. T. Richardson, 150 feet north and east of the SW cor. of the N half of Section 21, J. Scott Survey A-374. W. E. Maxon, Jr.'s No. 8 F. C. Green-B, 750 feet south and 850 feet east of the NW cor. of his 320-acre lease "B" out of the Joseph Levins Survey A-259.

Brown County

R. C. McCarter and others' No. 1 E. M. White, 200 feet south and west of the NE cor. of Section 29, H. Brewster Survey No. 790.

Coleman County

S. C. Yingling and others' No. 1 J. W. Gates, 660 feet south and east of the NW cor. of Section 64, Block 1, G.H.&H.

Cooke County

Fain McGaha Oil Corp.'s No. 2 C. A. Vestal, 750 feet north and 450 feet east of the most southerly SW cor. of the B.B.B.&C. Survey A-164.

Crane County

Gulf Production Co.'s No. 3 J. T. McElroy-B, 1,442 feet south and 990 feet west of the most easterly NE cor. of the Gulf Production Co.'s lease out of Section 216, Block F, C.C.S.D.&R.G.N.G.

Eastland County

Cranfill & Reynolds' No. 1 L. M. Powell, 1,050 feet south and 1,000 feet west of the NE cor. of Lot 15, W. Van Norman Survey. T. E. Brown and others' No. 1 R. Cordwent, 150 feet north and west of the NE cor. of the Higginbotham Brothers & Co. 138.4-acre tract and located on the R. Cordwent 100-acre tract out of Section 13, Block 6, E.T.R.R.

Ector County

Skelly Oil Co. and others' No. 3 University Land-A, 330 feet south and 440 feet east of the NW cor. of Section 1, Block 35, University Land.

Palo Pinto County

F. Guyer, trustee's No. 1 R. S. Dalton, 150 feet north and 1,800 feet east of the SW cor. of the N half of Section 1,790, T.E.&L. J. H. Richardson's No. 1 Sawyer, 500 feet north and 1,120 feet west of the SE cor. of the S. M. Williams Survey A-341. Root & Rhodes' No. 2 M. B. Costello, 990 feet southeast of the northwest line and 160 feet southwest of the northeast line of the M. B. Costello 116.5-acre tract out of the R. R. Williams Survey A-896. Texas Pacific Coal & Oil Co.'s No. 2 Texas Pacific Coal & Oil Co., 2,500 feet north and 3,500 feet west of the SE cor. of the H. Bird Survey A-26.

Parker County

Cook & Muller's No. 1 Williams & Pickens, 1,000 feet north and 1,200 feet west of the SE cor. of Section 47, T.&P. Owens & Spurlock's No. 1 J. F. Gilley, 1,800 feet north and 1,750 feet west of the SE cor. of the J. Wilcox Survey.

Pecos County

Continental Oil Co. and McMan Oil & Gas Co.'s No. 1 J. H. Tippett, 1,331 feet north and 150 feet west of the SE cor. of the west 160 acres of Section 40, Block 194, G.C.&S.F. Curry & Eakin's No. 1 Pecos Valley Oil Co., 1,050 feet northwest of the SE line and 1,470 feet northeast of the southwest line of Section 36, Block 3, H.&T.C. Humble Oil & Refining Co.'s No. 1 Mrs. C. L. Thomson-B, 1,608 feet south and 4,062 feet west of the NE cor. of Section 98, Block OW, G.C.&S.F.

Shackelford County

Graham & Hunter's No. 1 R. A. Elliott, 660 feet north and east of the SW cor. of the N half of Section 4, Bayland Orphan Asylum Land. Skelly Oil Co.'s No. 7 J. B. Matthews-C, 750 feet north and 450 feet east of the SW cor. of the SW of the NE of Section 31, Block 10, E.T.R.R.

The Texas Company's No. 1 J. B. Matthews-A, 150 feet north and west of the SE cor. of the N half of the SE of Section 57, Block 10, E.T.R.R.

Throckmorton County

C. F. Cornelius' No. 1 J. C. Irwin, 150 feet south and east of the NW cor. of the SE of the W. E. Crump Survey A-182. Gulf Production Co.'s No. 2 J. B. Matthews, 1,170 feet south and 2,490 feet west of the NE cor. of Section 234, Block 10, E.T.R.R.

Wichita County

Arkansas Fuel Oil Co.'s No. 38 Kemp & Kempner-A, 500 feet south and 700 feet west of the SE cor. of Block 81, Kemp Wichita Valley Land and located in Block 82. R. R. Clark and others' No. 7 W. P. and J. F. Bickley, 1,350 feet south and 150 feet west of the NE cor. of Section 2, C.&M., A-594. G. J. Proctor's No. 2 W. B. Monaker, 1,350 feet south and 150 feet east of the NW cor. of Section 1, C.&M., A-379.

Wilbarger County

Zenith Oil Co.'s No. 4 Mrs. S. A. Dill and others, 150 feet north and 450 feet east of the SW cor. of the SW of the SE of Section 82, Block 14, H.&T.C.

Winkler County

Magnolia Petroleum Co.'s No. 3 W. F. Scarborough, 1,650 feet south and 990 feet east of the NW cor. of Section 1, Block 77, School Land.

Young County

Consolidated Oil Co.'s No. 1 I. H. Gathright, 750 feet south of the C of Section 29, T.E.&L. F. P. Hynes and others' No. 1 G. T. Washburn, 155 feet north and 404 feet east of the SW cor. of the NE of Section 3, Gal. Br. & Nav. Co. Survey. Jacob Oil & Gas Co.'s No. 1 I. H. Gathright, 150 feet south and east of the NW cor. of Section 29, T.E.&L. Jeffs & McLafferty's No. 1 Bush & Thompson, 200 feet north and east of the SW cor. of Section 778, T.E.&L. Lindsey Drilling Co.'s No. 1 P. F. Lisle, 450 feet south and 150 feet west of the NE cor. of Section 111, T.E.&L. L. A. Long's No. 1 J. T. Sims, 1,491 feet south and 2,440 feet east of the NW cor. of Section 629, T.E.&L. George Mollenkoph's No. 4 B. H. Larimore and others, 500 feet south and west of the NE cor.

(Continued on Page 173)

WILDCAT OPERATIONS IN SOUTHWEST TEXAS

(Continued from Page 57)

Houston Oil Co.'s No. 2 Wormser, 200 ft. N of CSL, 964-ac. tract in the P. Maguellas Sur. ..... T. D. 2,792 ft.; drlg.

Humble Oil & Ref. Co.-Shell Pet. Corp.'s No. 2 Wm. Singers, 1,320 ft. W of E line, 1,800 ft. S of N line of Sec. 312, Alta Verde area, 7 miles SE from Lasater gas field ..... T. D. 4,420 ft. (cor.); drlg. shale.

Southern Crude Oil Purchasing Co.'s No. 1 Holbein-Wormser, 990 ft. from E line, 1,000 ft. from S line of Blk. 39, E. P. de Moguellas Sur. ..... Spudded.

BEE COUNTY

Edw. M. Jones' No. 1 Rapp, 990 ft. SE of NW cor. Sec. 11, Ragley Subd., Jose Maria Urangua Sur. ..... T. D. 6,062 ft.; abandoned; hole lost; will skid derrick; was carried as proven test in error.

E. M. Jones' No. 2 Rapp, 1,065 ft. from N line, 1,065 ft. W line of lease, Tuleta district ..... T. D. 2,661 ft.; drlg. shale.

William F. Morgan and Independent Oil & Gas Co.'s No. 1 Quincy, C Blk. 9 of 11,000-ac. Quincy Subd. of Bee County ..... T. D. 3,200 ft.; drlg.

O'Neal & Catlett's No. 1 Pat Pugh ..... Location.

Ed Price's No. 1 Mrs. Laura E. Weiss, 200 ft. out of NW cor. of B.&B. 640-ac. Sur. ..... T. D. 4,314 ft.; estimated 20,000,000 ft. gas; carried as proven by error.

Simms Oil Co.'s No. 1 Halzmark, 830 ft. SE line, 2,952 ft. SW line of J. A. York Sur. ..... T. D. 2,200 ft.; drlg.

Southern Crude Oil Purchasing Co.'s No. 1 M. Dahl, 887 ft. E line, 1,584 ft. N line of Mena Dahl 224-ac. tract in George Pagen Sur. ..... T. D. 4,350 ft.; dry and abandoned; carried as proven by error.

S. R. C. No. 1 Theis, 2,700 ft. from N line, 300 ft. from W line of 782-ac. tract, Burns Sur. ..... T. D. 620 ft.; drlg.

BEXAR COUNTY

Moore-Jauer's No. 1 Holly R. Ellison ..... T. D. 2,155 ft.; fishing.

K. M. S. Petroleum Co.'s No. 1 E. Salicky, 132 ft. from E line, 10 ft. S line of tract, Blk. 15, Mission Gardens ..... Location.

McElreath & Suggett and Wentz Oil Corp.'s No. 1 A. B. Stephens, 2,100 ft. to N line, 960 ft. to E line of tract in the P. W. Hays Sur., 7 miles E of San Antonio ..... T. D. 1,674 ft.; abandoned dry 50 ft. in Edwards.

Morgan Bros.' No. 1 Barkmeyer, 1,650 ft. to N line, 660 ft. to W line of 600-ac. tract in the P. Villapendo Sur., 8 miles SE from San Antonio ..... T. D. 690 ft.; abd., dry.

J. M. Russell's No. 1 F. L. Price, 1,590 ft. to N line, 660 ft. W line of tract in Angel Navarro Sur. ..... T. D. 50 ft.; shut down.

J. M. Russell's No. 1 A. O. Miles, 1,600 ft. N line, 600 ft. W line 450-ac. tract, Angel Navarro Sur., 10 miles S from San Antonio ..... T. D. 735 ft.; moving in.

Henry Yelvington et al's No. 1 Beck, 355 ft. from W line, 310 ft. from S line 100-ac. tract, SW cor. of P. W. Hays Sur., 7 miles E from San Antonio ..... T. D. 1,470 ft.; shut down.

Snyder, Reeves and others' No. 2 Glasscock, 12 miles NE of San Antonio ..... T. D. 200 ft.; drlg.

August Magel's No. 1 Alvin Beck, 520 ft. from W line, 1,300 ft. from S line of Sur. No. 36 ..... Location.

C. S. Bowman's No. 1 Riddler, 1,000 ft. from S and W lines of 700-ac. tract, Block 4311, Sur. No. 5 ..... Location.

CALDWELL COUNTY

J. T. Callahan's No. 1 W. H. Callahan, 630 ft. S line, 2,280 ft. W line 176-ac. tract in the J. R. Miller Sur. ..... T. D. 2,520 ft.; set 8⅝-in. casing.

W. E. Allaun's No. 1 Cosey, SW cor. of tract ..... Location.

W. E. Allaun's No. 2 McKean, 300 ft. W of No. 1 ..... Location.

Matthews and others' No. 1 Osteen, 150 ft. E of M.K.T. tracks, 150 ft. N of S line of lease, N. Kelley Sur. ..... Location.

CALHOUN COUNTY

The Texas Company's No. 1 Thomas in the J. D. Tilly Sur. ..... T. D. 4,050 ft.; drlg.

COLORADO COUNTY

Penn Oil Co.'s No. 1 H. C. Wilson, 450 ft. from W line, 450 ft. from N line of 50-ac. tract in the John McCrosky Sur., 5 miles E from Columbus ..... T. D. 4,738 ft.; dry and abandoned.

CONCHO COUNTY

Turner et al's No. 1 Borsig, 150 ft. from S of NE cor. of G. Emmig Sur., 6 miles W from Paint Rock ..... T. D. 735 ft.; shut down.

Beasley et al's No. 1 S. Waring estate, 1,320 ft. from S and E lines of Sur., Abstract 2,120 in the A. T. Robinson Sur. ..... Machine.

COMAL COUNTY

Caldwell & Lanier's No. 1 T. J. Byler, 175 varas from W line, 370 varas from N line of 320-ac. tract in the H.E.&W.T. No. 5,894 Sur. ..... T. D. 130 ft.; drlg.

New Braunfels Oil & Gas Co.'s No. 1 Adolph Seidemann, 269 ft. to NE line, 470 ft. to NW line of farm in the A. M. Esneurices 11-League Sur., 1 mile SE from New Braunfels ..... T. D. 314 ft.; drlg.

DEWITT COUNTY

H. T. Roe's No. 1 Leinhardt ..... T. D. 2,170 ft.; shut down.

DUVAL COUNTY

Vacuum Oil Co.'s No. 1 Duval County Ranch Co., 3,143 ft. N line, 1,363 ft. S line, Sur. 220 ..... Drlg. water well.

Sal Oil & Gas Co.'s (Southern Oil Co.) No. 2 Welder-Wood, 1,980 ft. E line, 2,490 ft. N line, Sur. 215 ..... T. D. 2,130 ft.; drlg.

T. W. Callahan and W. M. Howard's No. 1 J. M. Luby, 3,960 ft. N line, 3,960 ft. W line, Sur. 24 ..... T. D. 3,760 ft.; drlg.

Putnam & Walsh's No. 1 Hagist, 570 ft. N line, 150 ft. E line, Blk. 5, Sur. 269 ..... T. D. 2,310 ft.; drlg.

EDWARDS COUNTY

Phillips Pet. Corp.'s No. 2 A. G. Holman, 320 ft. from N and E lines of SE of tract, C.C.S.D.&N.G.R.G. Sur. No. 25 ..... T. D. 4,130 ft.; setting 8¼-in. csg.

James Dalglish's No. 3 Peterson, 850 ft. N line, 1,100 ft. W line of Sec. 82, Blk. E in the H.E.&W.T. Sur. ..... Location.

James Dalglish-Morrow's No. 1 Peterson, NW cor., Sec. 82, Blk. E, H.E.&W.T.R.R., NE cor. of county in the H.E.&W.T.R.R. Sur. ..... T. D. 1,765 ft.; drlg.; show salt water at 1,765 ft.

FRIO COUNTY

Simms Oil Co.'s No. 1 ..... Location.

A. H. Wray's No. 1 Burns estate, 700 ft. N, 330 ft. E of C Sec. 123, Antone Hupzor ..... T. D. 65 ft.; set 10-in. surface csg.

GOLIAD COUNTY

Union Prod. Co.'s No. 12 George Ray, 2,350 ft. SW of NE line, 330 ft. NW of SE line George A. Ray 400 ac. in the Wm. Southerland Sur. ..... T. D. 5,060 ft.; drlg.

A. G. Riemenschneider's No. 1 A. T. Fromme, 275 ft. from N line, 912 ft. W line of 300-ac. tract, P. Dexter Sur. ..... T. D. 2,430 ft.; standing.

GONZALES COUNTY

Mardon Oil Co.'s No. 1 Borrer, 150 ft. N and W in the James Stewart Sur., 5 miles NW from Waelder ..... T. D. 1,850 ft.; shut down.

Mardon Oil Co.'s No. 1 Robinson ..... T. D. 3,018 ft.; drlg. in sticky sand and shale.

Linden Pet. Corp.'s No. 1 Hensley, 650 ft. N line, 1,110 ft. W line of J. W. Hensley 100 ac. in the James Smith ..... T. D. 2,448 ft.; drlg. in boulders.

Lake Oil Co.'s No. 1 A. V. Campbell ..... Rigging up rotary tools.

United North & South Dev. Co.'s No. 2 Preston, 1,050 ft. NE, 450 ft. NW of upper S or SW cor. of Oethkin one-third league, 900 ft. SE of Prestin No. 1 ..... Location.

A. J. Keiffer et al's No. 1 B. B. Dix, 550 ft. W of E line, 2,775 ft. N of S line (Guadalupe River) in the Ira Nash Sur., 4 miles SE from Darst Creek ..... T. D. 2,816 ft.; hole cleaned; resumed drlg.; now coring.

Finnell & Elam's No. 1 J. F. Robinson, 2,000 ft. N line, 4,420 ft. E line, in the J. H. Livergood, 2½ miles NE from Waelder ..... T. D. 3,284 ft.; S. D. for repairs.

GUADALUPE COUNTY

Adams & Lyles' No. 1 Otto Nitche, 1,000 ft. S of N line of farm, 2,200 varas S of N line (Guadalupe River), 2,700 varas W of E line of Jesus Canter Sur., 5 miles SE from Seguin ..... T. D. 2,711 ft.; sulphur water; abd.

Guy Lewis' No. 1 Arno Link ..... T. D. 847 ft.; moving in tools.

Cranfill & Reynolds' No. 1 McIntire, 150 ft. to E line, 150 ft. to S line of 100-ac. tract in the A. Gibson Sur., 6 miles SE from Seguin ..... T. D. 1,309 ft.; shut down for fuel.

J. S. Suttle's No. 2 A. Baenzinger, 40 ft. E line, 150 ft. S line of tract in the A .O. Mansola Sur., 5½ miles S from Seguin ..... Location; to skid derrick and rig from No. 1.

Grayburg Oil Co.'s No. 2 Wells, 5,730 ft. E line, 2,490 ft. S line of NE cor. of Wells tract in the James D. Baume Sur., 6 miles SW from Darst Creek ..... Rigging up.

Cranfill & Reynolds' No. 1 Wilson, 150 ft. S line, 1,200 ft. to W line 92-ac. tract in the Jesus Canter Sur., 8 miles SE from Seguin ..... Location.

Brown Hinds et al's No. 1 George Altzger, 1,300 ft. from SE line, 1,100 ft. from SW line of 120-ac. tract in A. Mansola Sur. ..... T. D. 1,975 ft.; shut down in Del Rio.

Ray Oil Co.'s No. 1 R. Felsing, 300 ft. NW line, 450 ft. NE line, 120-ac. tract in the M. Baker Sur. ..... T. D. 780 ft.; drlg.; show of oil at 702 ft.

Miller & Calhoun's No. 1 Lindenberger, 750 ft. from E line, 650 ft. from S line of 250-ac. tract ..... T. D. 604 ft.; drlg.

J. O. Dore's No. 1 Appling, 150 ft. to S and W lines of tract, H. Cottle Sur. ..... T. D. 2,203 ft.; reinstated; drlg.

HAYS COUNTY

Hailey & Whittington's No. 1 Heidenrich ..... T. D. 735 ft.; shut down.

JACKSON COUNTY

The Texas Company's No. 1 Mitchell, 1,750 ft. E, 880 ft. N of SW cor. Ewing Sur. ..... T. D. 6,044 ft.; drlg. shale.

JIM HOGG COUNTY

Cole Petroleum Co.'s No. 1 Allen, 150 ft. from W line, 336 ft. from N line, Blk. 7, Sur. No. 23 ..... Location.

Wm. H. Barnhart's No. 1 McCampbell, 450 ft. to W line, 150 ft. to N line, Lot 33, Barnhart Subdivision, Los Viboritas grant ..... Location.

JIM WELLS COUNTY

J. Walsh et al's No. 1 W. D. Wade, 1,035 ft. NE line, 300 ft. NW line of N cor., Lot 1, Blk. C, W. H. Bode Subd. ..... T. D. 210 ft.; set 10-in. surface csg.; waiting on cement.

KARNES COUNTY

Clayton & Pierce's No. 1 Barnett in the Alex Hunter Sur., 6 miles N of Karnes City ..... T. D. 2,916 ft.; steaming up to resume.

J. F. Morrissey et al's No. 1 Ragsdale, 660 ft. SW of C of NE line of 170-ac. farm in the McCoull Sur. ..... T. D. 1,330 ft.; resumed drlg (corrected depth).

Dr. Hewitt's No. 1 W. E. Porter, 650 ft. from N line, 700 ft. from W line of 416-ac. tract in the Victor Blanco Sur., 8 miles SE from Runge ..... T. D. 2,700 ft.; drlg. in shale.

KENDALL COUNTY

Borgett et al's No. 1 Haag, W Avery Sur. ..... T. D. 940 ft.; drlg.

A. S. Mowinkle's No. 1 Kaston, 150 ft. from N line, 150 ft. from E line of tract, Sur. No. 724, 9 miles due W of Kendalia ..... T. D. 900 ft.; drlg.

Sitten et al's No. 1 Garvin, C of NE of D. L. Richardson Sur. in the D. L. Richardson Sur., 1 mile NE from Kendalia ..... T. D. 710 ft.; drlg.

Dickinson et al's No. 1 Edmondson, 150 ft. from S line, 350 ft. from W line of tract in the J. O. Blair No. 72 Sur., 1 mile NW from Kendalia ..... T. D. 40 ft.; spudded in and shut down.

Dixon Oil Co.'s No. 1 Ottmer Behr, W of H.T.&B.R.R. Sur., 3½ miles SE from Sisterdale ..... T. D. 1,790 ft.; drlg.

P. B. Sterling's No. 1 R. J. McCrocklin, 1,350 ft. from N line, 250 ft. from W line of the B. G. Owens Sur., 4 miles W from Kendalia ..... T. D. 553 ft.; drlg. in lime.

R. M. Perkins' No. 1 J. Lawhon, Sec. 10, 2,475 ft. E line, 1,488 ft. S line ..... T. D. 550 ft.; drlg.; have hauled out 800 ft. of 8-in. csg.

Permian Basin Oil Co.'s No. 1 Boles, S.A.&M.G. Ry. Sur. No. 542½ ..... Moving in machinery.

KERR COUNTY

Evans et al's No. 1 Love Ranch, 100 ft. from S line Sur. 1,597, 1,000 ft. E of W line of J. Martinez No. 1,594 Sur. ..... T. D. 700 ft.; setting 12½-in. csg.

KLEBERG COUNTY

Bowen & Sarles' No. 1 Robert, H. Simmons in the A. Houston Sur. No. 611, Sec. 7, King Subd., 150 ft. out of NW cor. of SW ..... T. D. 1,580 ft.; shut down; W.O.C.

KINNEY COUNTY

Magnolia Pet. Co.'s No. 1 Whitehead-Wardlaw, 2,640 ft. W line and S line of Meliton Valdez grant ..... T. D. 3,000 ft.; drlg.

Mardon Oil Co.'s No. 2 Jim Clamp ..... T. D. 2,714 ft. in hard sand; coring.

A. Blume et al's No. 2 Herbst, 1,731 ft. W and S lines of Sur. in the Poindexter-Burns Sur. ..... T. D. 275 ft.; shut down.

KIMBLE COUNTY

Lindley Bros.' No. 1 Anderson, Sec. 178, Muhenger Sur. ..... T. D. 990 ft.; shut down.

Dixie Oil Co.'s No. 1 Bodel, 900 ft. W of N line of Sec. 440, in Sec. 80, in the J. S. Patterson Sur. ..... Location.

C. L. Bryant et al's No. 1 Lambert, 7,700 ft. N and W lines of F. Lotta Sur. ..... T. D. 685 ft.; shut down.

LIVE OAK COUNTY

Catlett & O'Neil's No. 1 Pat Pugh, 620 ft. S line, 150 ft. E line of Pugh tract, Abstract 189, in the E. Games Sur. No. 253, 6 miles N from Dinero ..... Location.

Jacob, Buzzini & Pickett, Inc.'s No. 1 C. E. Kay, in the Bridgett Fadden Sur., 3 miles E from George West ..... Location.

O. Stalley et al's No. 1 Nichols, 2,000 ft. from W line, 500 ft. from S line in the Ayers Sur. ..... Location.

Markley and others' No. 1 Reeves-Brown, 1,200 ft to N line, 1,800 to E of Ry., King Sur. ..... Derrick.

Illinois Exploration Synd.'s No. 1 Reeves-Brown, 1,300 ft. S of Sellera tract, 1,800 ft. E of Ry. ..... Location.

LEE COUNTY

Burt et al's (M. D. Rickett) No. 1 R. C. Sanders ..... T. D. 2,810 ft.; shut down in shale.

Fedor Oil Co.'s No. 1 Aug. Schimank ..... T. D. 2,247 ft.; temp. abandoned.

A. H. Wheeler and associates' No. 1 Fee, 14 miles NE from McDade, Blk. 47, H. Donohoe Sur. ..... T. D. 500 ft.; casing.

J. P. Perry and others' No. 1 W. H. Thomas ..... T. D. 20 ft.; spudded.

McMULLEN COUNTY

Mogul Pet. Co.'s No. 1 Martin, 150 ft. NW line, 150 ft. to SW line of E. Melon No. 212 Sur. ..... Spudded in.

MAVERICK COUNTY

Rycade Oil Corp.'s No. 6 Chittim, 1,445 ft. from S, 320 ft. from W of Sec. 116, Blk. 7, I.&G.N. Sur. ..... T. D. 3,474 ft.; W.O.C.

Rycade Oil Corp.'s No. 5 Chittim, 600 ft. W of No. 3 Chittim, 500 ft. E line, 225 ft. from S line of SE Sec. 115, Blk. 7, in the I.&G.N. Sur. ..... T. D. 4,675 ft.; drlg.

Rycade Oil Corp.'s No. 5 Sullivan, in C of Sec. 82, Blk. 7, in the I.&G.N. Sur. ..... T. D. 6,868 ft.; bldg. bridge off bottom.

MEDINA COUNTY

Pat Armstrong's No. 1 C. W. Butts, in George C. Hanson Sur. ..... T. D. 1,918 ft.; drlg.

B. F. Newhaus et al's No. 1 Fusselman, 200 ft. E and S lines of tract (330-ac.) in the M. Castro Sur..... T. D. 1,220 ft.; drlg. shale.
Pearson Oil Co.'s No. 6 Medina Valley Inv. Co., 2,500 ft. S and E line of lease of Isom Palmer Sur. .....T. D. 1,000 ft.; comp., small gas well.
Pan American Dev. Co.'s No. 1 Antonio Hart, in Harrison Sur. No. 799, 15 miles S from Hondo .....T. D. 1,910 ft.; shut down.
National Oil Co.'s No. 1 Howard, 1,750 ft. E of W line, 1,854 ft. N of S line of survey in the John George Sur. No. 9, 10 miles S of Dunlay .....T. D. 1,645 ft.; not to drill in till completion of Zapata County well.
Caldwell et al's No. 1 L. W. Burrell .....T. D. 2,167 ft.; drlg.
Donaldson Oil & Dev. Co.'s No. 2 Hillenmeyer, James Hillenmeyer No. 25 Sur., 500 ft. to E line of survey, 150 ft. to S line of N half of survey .....T. D. 200 ft.; shut down.
Pat Armstrong's No. 1 Crawford, 1,389 ft. N line, 2,550 ft. E line of survey, 478.6 miles W from Devine.....T. D. 1,820 ft.; drlg. shale.
Lyuko Co.'s No. 1 Medina Valley Irrigation, 2,800 ft. to S line, 2,250 ft. to E line of E. Reisacher Sur. No. 509. Location.

MILAM COUNTY

Rheubotham & Tate's No. 1 Johnson, 325 ft. from N line, 250 ft. from W line of 40-ac. tract, D. Robinson Sur. .....Location.

NUECES COUNTY

Independent Oil & Gas Co.'s No. 1 Baldwin, 330 ft. each way out of NE of the J. C. Russell Subd., Blk. 11, 3 miles W from Corpus Christi .....T. D. 1,200 ft.; drlg.
R. A. Thompson et al's No. 2 Lawrence-Harrell, 300 ft. from N and E lines of Blk. 19 .....T. D. 1,659 ft.; estimated 20,000,000 ft. of gas.
Houston Oil Co.'s No. 1 Morgan, 105 ft. N of C of tract...Location.

SAN PATRICIO COUNTY

Magnolia Pet. Co.'s No. 1 Freeman, 660 ft. S and W lines of NW half of 80-ac. tract, Sec. 57, in the E. J. McGloin Sur. .....T. D. 5,526 ft.; previously reported as completed; now rigged up to drill deeper.
George B. Pickett's No. 1 Baldwin, 9,000 varas due E of Denton, 1,200 ft. S of the SE cor. of O'Neil Sur., Abstract 211 .....T. D. 4,012 ft.; moving in heavy rig to go to 6,000 ft.
J. L. Kennedy's No. 1 McRae, 1,170 ft. NW of the center of the SE line of 500-ac. tract. .....Building derrick.
Saxet Oil Co.'s No. 1 Carroll, 800 ft. N line, 130 ft. to W line, Lot 32-A, Sec. 32 of the fourth subd., Taft farms .....Moving in tools.
Union Prod. Co.'s No. 4 Welder, 3,000 ft. N line, 4,500 ft. E line of tract in the E. Portillo Sur. .....Spudded.
G. B. Peterman et al's No. 1 Crow, 150 ft. from S line, 170 ft. from W line of Sec. 24 of the Fulton-Coleman Pasture Lands, J. H. Paul Subd. .....Drlg. water well.
G. B. Peterman et al's No. 1 Foster, 150 ft. from E line, 1,430 ft. from N line of Blk. 5 of the Welder-Coleman-Fulton Sbd., 3½ miles W from Sinton .....Location.
Cosden Oil Co.'s No. 1 Schmolsteig, C of SE, Sec. 9, H. Powell Subd. in the B. Blanchard Sur. .....T. D. 3,100 ft.; drlg. in shale .
LaFeria Oil & Gas Co.'s No. 1 C. C. Smith, in J. C. White Sur., 690 ft. to N line, 350 ft. to E line.....T. D. 3,933 ft.; S.D. for fuel.

STARR COUNTY

I. V. Maclean's No. 1, Tract No. 5, 1,063-ac., Porcion 81, Juan Jose de la Garza in the Falcon grant .....T. D. 150 ft.; drlg.
Kush Exptln. Co.'s No. 1 Kelsey-Bass .....T. D. 400 ft.; drlg.
J. L. Smith's No. 1 Welch, Perdernal Sur. .....T. D. 925 ft.; showed gas in sand.
Virginia Oil Co.'s No. 1 Kelsey-Bass .....Location.

UVALDE COUNTY

E. Anglin et al's No. 1 U.P.P., 1,500 ft. from NW line, 7,450 ft. to NE line of Manual Leal Sur., 10 miles SE from Uvalde .....T. D. 1,194 ft.; drlg. in lime.
Waldrop & Welch's No. 1 E. R. Edmonds, 1,750 ft. NW, 7,300 ft. W of Sec. 71, in the A. Gomez Sur., 8 miles S of Uvalde .....T. D. 1,193 ft.; moving in heavier rig.
Phantom Oil Co.'s No. 1 Claudt, Sec. 611 .....T. D. 2,450 ft.; fishing.

VICTORIA COUNTY

Attlee Drlg. Co.'s No. 1 M. West, 5,100 ft. to NE line, 1,650 ft. to NW line of 1,800-ac. tract in the P. DeWitt Sur. .....T. D. 1,580 ft.; temp. abandoned.
The Texas Co.'s No. 1 A. M. McFadden, 1,550 ft. N and E lines of H. Bonny Sur. .....T. D. 3,000 ft.; drlg.

WEBB COUNTY

J. L. Elliot's No. 1 Esperonza Land & Stock Co., 950 ft. from N line, 2,231 ft. E line, Sur. 515 .....T. D. 1,200 ft.; drlg.

WILLIAMSON COUNTY

Texas Oil & Gas Development Co.'s No. 1 Gervert & Allison, 9 miles NE from Taylor .....Derrick.

ZAPATA COUNTY

T. H. Ward's No. 1 Uribe, 150 ft. NW line, 150 ft. SW line, Blk. 9 Subd., Share 7, Partition No. 6, T. Uribe Partition of Jose V. Borrego Sur. .....Rigging up.
B. F. Nixon's No. 1 A. Gutierrez, 170 ft. S line, 333 ft. E line, Lot 5, Blk. 3, Partition 10, Borrego grant ....T. D. 50 ft.; standing.
Penny Prod. Co.'s No. 1 Juan V. Cuellar, Jr., et al, 175 ft. NE line, 175 ft. SE line Poppas Subd., Porcion 33 and 34, Blk. 1, Sur. 2 .....T. D. 175 ft.; drlg.
Penny Prod. Co.'s No. 1 Trevino, 300 ft. SE line, 200 ft. NE line Marts & Beavers Subd. of Porcion 2 and 3, Blk. 6, Sur. 4 .....T. D. 757 ft.; moving in heavier rig.
National Oil Co.'s No. 1 D. B. Adams .....T. D. 1,180 ft.; preparing to set csg.
F. M. Blair & Son's No. 1 Gutierrez, 150 ft. from NW line, 660 ft. from SW line, Blk. 2, Blair Subdn., Comitas grant .....Location.
Lincoln Oil & Gas Co.'s No. 1 Gutierrez, Blk. 23, Subd., La Huerta grant .....Location.

ZAVALA COUNTY

Krebs & Davis' No. 1 Weatherby, E center of NW of Sec. 44, Blk. A, Adams, Beaty & Mouton Sur., 4 mi. E from Loma Vista .....T. D. 1,782 ft.; drlg.
Ed Anglin's No. 5 Pryor .....T. D. 1,034 ft.; drlg. (corrected depth).
Texas Gas Utilities Co.'s No. 1 Ike T. Pryor, Jr. .....T. D. 1,124 ft.; set 6⅝-in. casing.

LOUISIANA-ARKANSAS PROVEN AREAS

(Continued from Page 54)

BOSSIER PARISH—SLIGO

La. G. & F. Co.'s No. 4 Skannal, 3,300 ft. E, 660 ft. S, NW cor., Sec. 13-17-12.....Began drlg. Aug. 7; 12-in. 63 ft; drlg. 1,575 ft.

CADDO PARISH—GREENWOOD

Calatex O. & G. Co.'s No. 1 Edgar, 1,460 ft. S, 1,900 ft. E, NW cor., Sec. 17-16-16.....Location.
Calatex O. & G. Co.'s No. 1 McAnn-Alfred, 1,810 ft. S, 970 ft. E, NW cor., Sec. 17-16-16.....Location.
Calatex O. & G. Co.'s No. 1 Hudson, 2,295 ft. N, 660 ft. E, SW cor., Sec. 8-16-16.....Derrick.
Calatex O. & G. Co.'s No. 2 Taylor-Trosper, 45 ft. N, 1,320 ft. E, SW cor., Sec. 8-16-16.....Drlg. 2,970 ft.

CADDO PARISH—MOORINGSPORT

Falcon Oil Co.'s No. 1 Miller, 1,020 ft. N, 1,320 ft. E, SW cor., Sec. 29-20-15 .....Fishing D.S. 2,240 ft.
The Texas Co.'s No. 5 Leonard fee, 2,440 ft. W, 200 ft. S, NE cor., Sec. 29-20-15 .....Bailing to test 2,350 ft.

CADDO PARISH—OIL CITY

The Texas Co.'s No. 73 Levee Board, 1,642 ft. E, 780 ft. N, SW cor. SW SE, Sec. 27-21-16.....Location.

CADDO PARISH—PINE ISLAND

Shreveport Oil Corp.'s No. 6 Hicks et al, 880 ft. N, 1,360 ft. W, SE cor. NE NW, Sec. 32-21-15.....W.O.S.R. 2,119 ft.

DE SOTO PARISH—HOLLY

Standard Oil Co.'s No. 2 Dowling Bros., 330 ft. S, 330 ft. W, NE cor. SW NE, Sec. 5-13-13.....Drlg. 1,928 ft.

LA SALLE PARISH—URANIA

Montugu Oil Co.'s No. 8 Zenoria Lbr. Co., 710 ft. S, 250 ft. W, NE cor., Sec. 10-9-1e.....W.O.S.R. 1,510 ft.

MOREHOUSE PARISH

Bahan & Bahan's No. 4 Feazel, 900 ft. W, 330 ft. S, NE cor., Sec. 2-20-4 .....Location.
Grecian Bend Gas Co.'s No. 1 J. D. Sandidge et al, 660 ft. W, 1,980 ft. N, SE cor. NE, Sec. 2-20-4.....Location.
Industrial Gas Co.'s No. 2 fee, 660 ft. E, 660 ft. S, NW cor. NE, Sec. 3-20-4.....Drlg. shale 2,060 ft.
La. G. & F. Co.'s No. 26 Crossett, 645 ft. E, 574 ft. S, NW cor., Lot 9, Sec. 33-21-5.....Plugged back to 2,369 ft. to cut off S.W; T.D. 2,380 ft.
Ouachita Nat. Gas Co.'s No. 6 Sandidge, 732 ft. S, 1,209 ft. W, NE cor. SE, Sec. 23-20-4.....Rig up.

OUACHITA PARISH

Amalgamated Co.'s No. 1-B Kate Cole, 660 ft. N, 660 ft. E, SW cor. NE SW, Sec. 25-20-4.....Rig up.
Carbon Cons., Inc.'s No. 5 Guthrie (was United Oil & Nat. Gas Co.'s No. 5 Guthrie), 6,634 ft. N, 7,078 ft. W, cor. Secs. 49, 25 and 26, in Sec. 50-20-4..... 8-in. 2,096 ft.
Greenwood Prod. Co.'s No. 1 J. E. Morris, 3,923 ft. E, 660 ft. S, SW cor. NW NW, Sec. 36-19-3.....Drlg. shale 1,730 ft.
Jordan Drlg. Co.'s No. 7 Cole, 265 ft. S, 1,459 ft. W, NE cor., Sec. 49, in Sec. 50-18-4.....Location.
Jordan Drlg. Co.'s No. 1 J. P. Parker, 950 ft. N, 485 ft. W, cor. Secs. 41, 9 and 16, in Sec. 41-18-4.....Drlg. 660 ft.
Jordan Drlg. Co.'s No. 1 School, 216 ft. S, 244 ft. W, NE cor. NW, Sec. 16-18-4.....Location.
La. G. & F. Co.'s No. 4 Breard, S 9°, W 966 ft., S 81°, E 451 ft., NW cor., Sec. 43-18-4.....Drlg. shale 1,260 ft; set 8-in. 790 ft.
Pipes & Mack's No. 1 Union Gas Products Co., Inc., 1,598 ft. W, 297 ft. N, SE cor. SW, Sec. 7-18-5.....Tested dry 2,460 ft; W.O. 2,500 ft.
Pipes & Mack's No. 2 Union Gas Products Co., 296 ft. W, 528 ft. N, SE cor. SW, Sec. 7-18-5.....Location.
United Carbon Co.'s No. 6 Spade, 1,180 ft. S, 140 ft. E, NW cor., Sec. 27-19-4.....Location.
United O. & N. G. Co.'s No. 2 Cole, 660 ft. S, 594 ft. E, C, Sec. 26-20-4.....Derrick.

RICHLAND PARISH

W. C. Feazel's No. 1 R. B. Simon, 2,406 ft. W, 2,020 ft. S, NE cor., Sec. 11-16-6.....Rig moved; derrick.
Franklin O. & G. Co.'s No. 1 Thompson, 660 ft. N, 165 ft. W, SE cor. NE, Sec. 14-16-6.....Location.
Hope Prod. Co.'s No. 1 A. H. Brown, 1,932 ft. N, 1,009 ft. W, SE cor., Sec. 22-16-6.....Cmtd. 6-in. 2,285 ft.
Hope Prod. Co.'s No. 1 J. E. Duff, 660 ft. N, 1,980 ft. W, SE cor., Sec. 15-16-6.....Rig up.
International Gas Prod. Co.'s No. 1 Minnie LaGrone, 769 ft. N, 858 ft. E, SW cor., Sec. 7-16-7.....Location.
La. G. & F. Co.'s No. 1 Etheridge, 1,412 ft. S, 770 ft. E, NW cor. NE, Sec. 28-17-6.....Location.
Northern La. Nat. Gas Co.'s No. 2 J. H. Hemler, 660 ft. S, 1,995 ft. W, NE cor., Sec. 11-16-6.....Set 6-in. 2,300 ft.
Northern La. Nat. Gas Co.'s No. 2 L. R. Hemler, 1,990 ft. E, 663 ft. N, SW cor. NW, Sec. 23-16-6.....Drlg. 2,300 ft.
Northern La. Nat. Gas Co.'s No. 5-B McCoy, 1,650 ft. S, 660 ft. W, NE cor., Sec. 17-16-6.....Derrick.
Northern La. Nat. Gas Co.'s No. 1 McKay, 681 ft. W, 559 ft. N, SE cor. SW, Sec. 22-16-6.....Rig up.
Palmer Corp.'s No. 1-B Boykin, 177 ft. S, 787 ft. E, C, Sec. 33-17-6.....Derrick.
Palmer Corp.'s No. 1 Hill, 1,320 ft. S, 660 ft. E, NW cor. SW, Sec. 21-16-6.....9-in. 876 ft.
Southern Carbon Co.'s No. 1-B Hallock, 1,622 ft. N, 990 ft. W, SE cor. NW, Sec. 1-16-6.....Began drlg. June 12; cmtd. 12-in. 185 ft; 8-in. 865 ft.
Southern Carbon Co.'s No. 1-B Hemler, 660 ft. N, 1,435 ft. E, SW cor., Sec. 1-16-6.....6-in. 2,285 ft.
Southern Carbon Co.'s No. 2-C M. L. McCoy, 1,880 ft. N, 5,024 ft. E, SW cor., Sec. 1-16-6.....Location.
Southern Carbon Co.'s No. 5 F. B. and E. A. Sartor, 1,150 ft. E, 531 ft. S, NW cor. SW, Sec. 19-16-6.....Cmtd. 6-in. 2,300 ft; drlg. 2,390 ft.
Southern Carbon Co.'s No. 6 F. B. and E. A. Sartor, 2,640 ft. N, 2,031 ft. W, SE cor., Sec. 24-16-5.....Began drlg. Aug. 8; 12-in. 189 ft; drlg. 460 ft.
Southern Carbon Co.'s No. 1-C T. R. Sartor, 660 ft. S, 660 ft. W, NE cor., Sec. 29-16-6.....S.D. 2,430 ft.
Southern Carbon Co.'s No. 1 H. L. Thomason, 1,980 ft. S, 665 ft. E, NW cor., Sec. 11-16-6.....6-in. 2,285 ft.
Southern Carbon Co.'s No. 1-B Thomason et al, 2,310 ft. W, 100 ft. S, NE cor., Sec. 23-16-6.....Drlg. 920 ft.
Southern Carbon Co.'s No. 1-C Thomason, 1,980 ft. N, 1,400 ft. W, SE cor., Sec. 14-16-6.....Location.
Southern Carbon Co.'s No. 1-D Thomason, 1,320 ft. S, 660 ft. W, NE cor., Sec. 31-16-6 .....8-in. 875 ft; drlg. 1,070 ft.
United Carbon Co.'s No. 1 Boise, 1,320 ft. W, 660 ft. N, SE cor., Sec. 28-16-6.....Drlg. 1,860 ft.
United Carbon Co.'s No. 1-A J. M. Thomason, 2,032 ft. N, 3,338 ft. W, SE cor., Sec. 22-16-6.....Drlg. 1,990 ft.

SABINE PARISH—PLEASANT HILL

Ark. Fuel Oil Co.'s No. 14 Logan, 1,035 ft. N, 241 ft. W, C, Sec. 33-10-12.....Swbng. to test broken sand 1,230 ft.
F. A. Bartlett, Jr.'s No. 1 Logan, 200 ft. S, 200 ft. E, NW cor., Sec. 27-10-12.....Began drlg. July 13; cmtd. 12-in. 110 ft.
J. M. Bridges, trustee's No. 1 Cook Land Co., Sec. 34-10-12 .....6⅝-in. 3,146 ft; T.D. 3,191 ft.
A. C. Glassell's No. 1 Logan Oil Co., 300 ft. E, C, Sec. 23-10-13 .....Drlg. chalk 1,535 ft.

SABINE PARISH—ZWOLLE

Tom Davis' (was T. D. Allison's) No. 1 Holliday, Sec. 31-8-12, Zwolle Townsite .....S.D. wtr. 1,350 ft.
F. M. Hood's No. 1-B (was No. 2) Winston, 700 ft. E, 425 ft. S, NW cor., Sec. 31-8-12, Zwolle Townsite....S.D. 1,065 ft.
Ab Jones et al's No. 1 Ferguson, 330 ft. N, 330 ft. W, SE cor. NE SW, Sec. 33-8-12.....Rig up.
Loring Oil Co.'s No. 8 Bowman-Hicks, 330 ft. S, 330 ft. E, NW cor. SW SE, Sec. 33-8-12.....Shot with 270 qts; C.O. T.D. 2,700 ft.
Loring Oil Co.'s No. 10 Bowman-Hicks, 330 ft. N, 330 ft. E, SW cor. NE SE, Sec. 33-8-12.....S.D. 2,664 ft.
Loring Oil Co.'s No. 11 Bowman-Hicks, Sec. 34-8-12.....Cmtd. 6⅝-in. 2,330 ft; T.D. 2,382 ft.
Loring Oil Co.'s No. 2 Sabine Lbr. Co., 1,430 ft. E, 340 ft. N, C, Sec. 34-8-12.....Reaming to set 6⅝-in. 2,294 ft.
Loring Oil Co.'s No. 1 Schuffert, 330 ft. S, 330 ft. W, NE cor. NE SE, Sec. 27-8-12.....Began drlg. Aug. 7; 10-in. 105 ft; drlg. 784 ft.
Ohio Oil Co.'s No. 5 Bowman-Hicks, 330 ft. N, 330 ft. E, SW cor., Sec. 33-8-12.....Bailed dry 2,678 ft; arranging to deepen.
W. D. Perritt et al's No. 1 Elliott, 150 ft. N, 150 ft. E, SW cor. SW SE SW, Sec. 30-8-12.....Arranging to set 6-in. 2,214 ft.
Philp Bros.' No. 1 Dow, Lot 1, Blk. 13, Zwolle Townsite, Sec. 31-8-12.....Bailed dry 2,300 ft; S.D.

Posey et al's No. 1 Peterson, Blk. 16, Zwolle Townsite, Sec. 31-8-12.....S.D. 250 ft.
A. H. Tarver's No. 3 Sabine State Bank, 330 ft. N, 330 ft. W, SE cor. SW NW, Sec. 26-8-12.....Cmtd. 6-in. 2,325 ft; T.D. 2,377 ft.
Wheatcroft et al's No. 1 Sabine Lbr. Co., SW NE, Sec. 31-8-12.....Drlg. 2,475 ft.

SABINE PARISH—BLUE LAKE

R. L. Gay's No. 8 Bowman-Hicks, Sec. 18-7-13.....Bailing to test 2,552 ft.
R. L. Gay, trustee's No. 5 Sabine Lbr. Co., 330 ft. S, 330 ft. W, NE cor. SE NE, Sec. 15-7-14.....Set 10-in. 70 ft; drlg. 600 ft.

UNION PARISH

Industrial Gas Co.'s No. 6 Grayling Lbr. Co., 660 ft. E, 665 ft. N, SW cor. NW, Sec. 53-21-4.....Derrick.
Interstate Nat. Gas Co.'s No. 1 J. M. Edwards, 1,980 ft. W, 660 ft. S, NE cor., Sec. 11-21-3.....Rig up.
Nemours Corp.'s No. 2 Hollis, 817 ft. S, 995 ft. W, NE cor. NW, Sec. 11-20-3.....Location.
Stovall Drlg. Co.'s No. 1 Murray, 1,650 ft. N, 330 ft. W, SE cor. SW, Sec. 32-23-4.....Rig up.

WEBSTER PARISH—SAREPTA AND SHONGALOO

Ideal O. & G. Co.'s No. 1 Coyle, 300 ft. N, 300 ft. E, SW cor. SW SE, Sec. 24-23-11.....Derrick.
H. M. Jones Drlg. Co.'s (was E. W. Bateman's) No. 2 Cook, 200 ft. S, 200 ft. W, NE cor. SE NW, Sec. 2-22-11.....14-ft. sand; W.O.S.R. 2,727 ft.
H. M. Jones Drlg. Co.'s No. 1 Womble, 860 ft. S, 200 ft. E, NW cor. SW, Sec. 1-22-11.....Derrick.
K. C Supply Co.'s No. 1 Cochrane, 330 ft. N, 330 ft. W, SE cor. E½ NW, Sec. 36-23-11.....Plugged back to 2,713 ft; T.D. 2,726 ft.
Liggett et al's No. 1 Slack, 720 ft. E, 150 ft. N, SW cor. SE, Sec. 36-23-11.....Cmtd. 6-in. 2,732 ft.
Liggett et al's No. 2 Slack, 720 ft. E, 150 ft. N, SW cor. SE SE, Sec. 36-23-11.....Drlg. 2,600 ft.
Magnolia Pet. Co.'s No. 2 Sally Coyle, 150 ft. N, 150 ft. W, SE cor, SE NE, Sec. 2-22-11.....Drlg. chalk 2,500 ft.
Merrick Oil Corp.'s No. 3 Slack, 330 ft. N, 330 ft. W, SE cor. SW SE, Sec. 36-23-11.....Derrick.
Sarepta Oil Co.'s No. 3 Gardner, 396 ft. N, 78 ft. E, SW cor. NW NW, Sec. 6-22-10.....Derrick.
S. H. Riggs, trustee's No. 1 L. & A., 250 ft. S, 530 ft. E, NW cor. NW NE, Sec. 1-22-11.....S.D. 2,100 ft.
S. H. Riggs, trustee's No. 2 L. & A., 255 ft. S, 600 ft. W, NE cor. SW NE, Sec. 36-23-11.....Derrick.
S. H. Riggs, trustee's No. 3 L. & A., 255 ft. N, 600 ft. W, SE cor. NW NE, Sec. 36-23-11.....Location.
S. H. Riggs, trustee's No. 4 L. & A., 255 ft. S, 600 ft. W, NE cor. NW SE, Sec. 36-23-11.....Location.
W. O. Neely's No. 1 J. R. Slack, 150 ft. N, 150 ft. E, SW cor., Sec. 12-22-11.....Location.
Sarepta Oil Co.'s No. 2 Gardner, NE SW, Sec. 1-22-11.....Rig up.
Sarepta Oil Co.'s No. 1 Slack, SW cor. NW NE, Sec. 36-23-11.....Rig up.
Southern Prod. Co.'s No. 4 Slack, 600 ft. N, 600 ft. W, SE cor. NW NE, Sec. 1-22-11.....Location.

ARKANSAS

JOHNSON COUNTY

Ark.-La. P. L. Co.'s No. 1 Cline, 660 ft. S, 660 ft. W, NE cor. NE SE, Sec. 16-10-24.....7-in. at 3,325 ft; bailing csg.
Conn Grable's No. 1 Hoeing, 720 ft. N, 590 ft. W, SE cor., Sec. 20-9-25.....S.D. 2,070 ft; C.D.

NEVADA COUNTY

C. F. Steele's No. 1 E. W. Groves, Sec. 21-14-20.....S.D. 2,810 ft.

OUACHITA COUNTY—SMACKOVER

L. H. Hamilton's No. 3 Doyle, 100 ft. E, 400 ft. N, SW cor. SE SE, Sec. 23-15-16.....Derrick.
Standard Oil Co.'s No. 7 Farris, 200 ft. S, 200 ft. W, NE cor. NW NW, Sec. 34-15-15.....Drlg. 1,640 ft.
Wilson & Chapman's No. 1-B Arnold, 330 ft. N, 330 ft. E, SW cor. SE SW, Sec. 24-16-15.....Rig up.

UNION COUNTY—CHAMPAGNOLLE

Ohio Oil Co.'s No. 10 Crain, 330 ft. S, 330 ft. W, NE cor. SE SW, Sec. 1-17-14.....Location.
Magnolia Pet. Co.'s No. 1 Gregory, Sec. 15-17-14.....D.S. test 2,859-64 ft; 14 joints oil; cmtd. 5¾-in. 2,859 ft; T.D. 2,864 ft.
Ohio Oil Co.'s No. 2 R. Pumphrey, 330 ft. N, 330 ft. E, SW cor. NE, Sec. 12-17-14.....Derrick.
Ohio Oil Co.'s No. 4 R. Pumphrey, 330 ft. S, 330 ft. W, NE cor. NE NW, Sec. 12-17-14.....Location.
Sundby et al's No. 2 Perdue, 75 ft. S, 150 ft. E, NW cor., Sec. 32-16-14.....S.D. 3,205 ft.

UNION COUNTY—EL DORADO

H. L. Hunt's No. 6 Pratt, 150 ft. N, 330 ft. E, SW cor. NE NE, Sec. 7-18-15.....S.W. 3,214 ft.
Malloy & Co.'s No. 1 Murphy, Sec. 1-18-16.....Rig up; W.O.
Malloy & Co.'s No. 3 Robertson, NE cor. S½ SW NE, Sec. 6-18-15.....Location.

EAST TEXAS

HARRISON COUNTY

Calatex O. & G. Co.'s No. 6 Agurs, 755 ft. N, 699 ft. W, Mile Post 27, in J. Womack Sur.....Location.
Shell Rock Pet. Co.'s No. 1 Oliver Dougherty, W. D. Burris Sur.....Fishing; T.D. 3,448 ft.

PANOLA COUNTY

Ark.-La. P. L. Co.'s No. 2-A G. W. Brumble, 477 ft. W, 473 ft. S, NW cor., Jno. Womack Sur., in B. C. Jordan Sur.....Drlg. lime 4,384 ft.
S. E. Bell et al's No. 1 Burnett Lbr. Co., center S. B. Hendricks Sur.....Began drlg. Aug. 5; 10-in. 110 ft; D.S. test dry 1,051 ft; drlg. gumbo 1,075 ft.
Jackson et al's No. 1 Dunham, 150 ft. W, 150 ft. N, SE cor., M. I. Dunham 29 ac., in Chas. Haley Sur.....S.D. 2,005 ft.
Nat. Gas Products Co.'s No. 3 Tom Moore, 889 ft. E, 7,928 ft. S, NW cor., B. C. Jordan Sur.....Drlg. 3,964 ft.
The Texas Co.'s No. 10 G. W. Brumble, SE cor., E. F. Mitcheson Sur.....Began drlg. July 17; cmtd. 10-in. 38 ft; drlg. 1,450 ft.
The Texas Co.'s No. 11 G. W. Brumble, 2,814 ft. N, 700 ft. W, SE cor., E. F. Mitcheson Sur.....10-in. 42 ft; drlg. 240 ft.
Doris Thomason's No. 15 Crenshaw, 1,992 ft. S, 2,305 ft. E, SW cor. Jno. Womack Sur., in B. C. Jordan Sur.....Derrick.
Warren & Davis' No. 1 McNuse, 1,671 ft. S, 1,329 ft. E, NW cor., Abe Brooker Sur.....Derrick.

WILDCAT OPERATIONS IN LOUISIANA-ARKANSAS

(Continued from Page 54)

CLAIBORNE PARISH

El Dorado Chief Oil Co.'s No. 1 Dance, C SW NE, Sec. 27-20-7.....S.D. 2,240 ft.
La. G. & F. Co.'s No. 1 Tensas Delta Land Co., 660 ft. N, 1,318 ft. E, SW cor., Sec. 23-6-5.....Location.
Lone Oil Co.'s No. 1 Taylor, 1,153 ft. S, 360 ft. W, C, Sec. 16-22-6.....T.A. 3,004 ft.
Triangle Drlg. Co.'s No. 1 Hodges et al, 660 ft. S, 660 ft. E, NW cor. NW SW, Sec. 6-19-5.....12½-in. 1,501 ft; drlg. chalk 2,269 ft.

CONCORDIA PARISH

A. C. Glassell's No. 1 Pittsfield Plantation, N 9°, E 1,320 ft., SW cor., Sec. 41-8-10.....Blew out between 1,392-1,450 ft; estimated 1,000,000 ft. gas; bridged; recmtd. 8¼-in. 1,370 ft; S.D; T.D. 1,453 ft.
Joe Marr et al's No. 1 Maxwell, C, Sec. 35-3n-8e.....8-in. stuck at 1,300 ft; T.D. 2,820 ft.

DE SOTO PARISH

Ark.-La. P. L. Co.'s No. 2 Johnson, 2,144 ft. N, 1,343 ft. W, C, Sec. 7-11-13.....Tested dry 2,891 ft; reaming to bottom.
Joe Burnham et al's No. 1 Mary Hood, 320 ft. W, 201 ft. S, NE cor. SE SE NE, Sec. 3-11-14.....S.D. for fuel 1,960 ft; tested show oil, 500,000 ft. gas 1,960-70 ft; drlg. 2,150 ft.
J. W. Clark's No. 1 Tidwell, NW cor. NW, Sec. 22-13-14.....Derrick.
J. W. Clark's (was Sam Gold et al's) No. 1 Platt, 200 ft. S, 200 ft. W, NE cor. SW, Sec. 23-13-14.....Drlg. chalk 2,005 ft.
Gulf Ref. Co.'s No. 1 Dry, 2,390 ft. N, 200 ft. E, SW cor., Sec. 14-11-15.....Coring shale 2,832 ft.
Bud Harrell's No. 1 Horton, 450 ft. E, 150 ft. N, SW cor., Sec. 4-11-11.....S.D. 1,060 ft.
Frank Melat, Inc.'s No. 1 Schryver, 175 ft. E, 175 ft. N, SW cor. NW SW, Sec. 35-14-13.....W.O.S.R. 2,819 ft.
Michlouzanna O. & G. Co.'s No. 1 Payne, 410 ft. S, 398 ft. E, NW cor., Sec. 12-11-16.....S.D. 2,600 ft.
Odell & Lawton's No. 1 Tidwell-Tull, 300 ft. N, 600 ft. E, SW cor. NW, Sec. 11-13-14.....Coring 2,850 ft.
Pelham & Bumby's No. 1 Rhodes, C S½ SE, Sec. 32-13-14.....Coring sandy lime 2,686 ft
Philp et al's No. 1 Talbot, 220 ft. S, 730 ft. W, NE cor. NW NE, Sec. 9-13-13.....Derrick.
R. O. Roy's No. 1 Nelson, 660 ft. S, 660 ft. E, NW cor., Sec. 36-15-13.....Drlg. 2,500 ft.

JACKSON PARISH

El Dorado Chief O. & G. Co.'s No. 1 Sou. Advance Paper Bag Co., 225 ft. N, 275 ft. E, SW cor. SW NE, Sec. 35-15-4.....S.D. 1,400 ft.

LINCOLN PARISH

Ark. Fuel Oil Co.'s No. 1 Lewis & Co., 300 ft. N, 300 ft. W, SE cor. NW SE, Sec. 26-20-4.....D.S. test 4,234-74 ft; show oil-gas; arranging to set 6⅝-in.; T.D. 4,292 ft.

MOREHOUSE PARISH

Pelican Nat. Gas Co.'s No. 1 Tensas Delta Land Co., 1,320 ft. N, 660 ft. E, NW cor., Sec. 17-18-6.....Rig up.

NATCHITOCHES PARISH

W. M. Coats' No. 1 Collins, 730 ft. N, 50 ft. E, C, Sec. 28-9-10.....Arranging to set 8⅝-in.
J. W. Cooper et al's No. 1 Cooper, NW SW, Sec. 35-11-10.....Rig up.
S. D. McDaniel's No. 2 Clark & Morse, 800 ft. E, 350 ft. N, C, Sec. 23-5-6.....Tested 1,000,000 ft. gas and S.W. 3 ft; S.D. for orders; T.D. 2,526 ft.
Robeline O. & G. Co.'s No. 1 Winn, 558 ft. N, 348 ft. E, SW cor. SE, Sec. 7-8-9.....S.D. 1,600 ft.

RAPIDES PARISH

Ayers Bros.' No. 1 Wickliff, 2,790 ft. N, 150 ft. E, SW cor., Sec. 9-5n-2e.....Drlg. 3,400 ft.

RED RIVER PARISH

E. C. Lucas' No. 1 La. Pecan Co., Sec. 26-13-11.....6-in. 2,440 ft; T.D. 2,460 ft
Geo. L. Pace et al's No. 1 Clarkson, 200 ft. S, 200 ft. E, NW cor. NE, Sec. 30-12-9.....Drlg. 1,900 ft.

RICHLAND PARISH

Austin & McDonald's No. 1 Hunt, 594 ft. N, 660 ft. E, SW cor., Sec. 13-17-5.....Cmtd. 12½-in. 200 ft.
Austin & McDonald's No. 2 Millsaps, SW cor., Sec. 17-17-6.....Waiting orders; T.D. 2,657 ft.
Austin & McDonald's No. 3 Millsaps, 1,980 ft. S, 660 ft. E, NW cor., Sec. 16-17-6.....Tested S.W; W.O. 2,477 ft.
Austin & McDonald's No. 4 Millsaps, NW cor., Sec. 16-17-6.....Location.
Austin & McDonald's No. 5 Millsaps, 2,640 ft. N, 1,320 ft. W, SE cor., Sec. 8-17-6.....Derrick.
W. C. Feazel's No. 1 Landrum, 620 ft. N, 4,573 ft. E, SW cor., Sec. 6-16-7.....Derrick.
Island Gas Co.'s No. 1 Noe, 1,902 ft. N, 660 ft. W, SE cor., Sec. 3-16-5.....Began drlg. Aug. 13; drlg. 50 ft.

SABINE PARISH

Ark.-La. P. L. Co.'s No. 1 Whitney, 660 ft. S, 660 ft. E, C, Sec. 28-10-14.....Coring 3,144 ft.
Boone, trustee's No. 1 J. B. Hill, NE, Sec. 4-6-11.....(No check); derrick.
LeGrand Oil Co., Inc.'s No. 1 J. W. Hale, 200 ft. N, 200 ft. E, SW cor. NE NW, Sec. 1-7-13.....Location.
Lohman & Walker's No. 1 Hubley, 330 ft. N, 330 ft. W, SE cor. SE NE, Sec. 21-7-11.....Small gas blowout in sand 1,311-13 ft; arranging to cmt. 8-in. 1,313 ft.
Longoria et al's No. 1 Belton, 330 ft. S, 330 ft. E, C, NE, Sec. 31-9-13.....Rig up.
Loring Oil Co.'s No. 1 Peavy-Wilson Lbr. Co., 200 ft. S, 330 ft. W, NE cor. SW NE, Sec. 21-6-13.....D.S. stuck 4,792 ft.
Lohman et al's No. 1 Wyatt Lbr. Co., 150 ft. S, 330 ft. E, NW cor. NE SW, Sec. 18-4-11.....Rig up.
Magnolia Pet. Co.'s No. 1 Glauque, 484 ft. N, 390 ft. E, SW cor. NW SW, Sec. 26-7-14.....12½-in. 1,197 ft; drlg. 1,237 ft.
J. C. McDaniel & Lieber's No. 1 Batson, 675 ft. N, 318 ft. E, SW cor. SE, Sec. 16-18-12.....Show oil; bailed dry; W.O. 2,526 ft.
Paramount O. & G. Co.'s No. 1 Woolems, 330 ft. N, 330 ft. W, SE cor. NE NW, Sec. 11-6-12.....Drlg. 2,040 ft.
Pelican Nat. Gas Co.'s No. 3 La. Long Leaf Lbr. Co., 200 ft. S, 200 ft. W, NE cor. SW, Sec. 4-7-11.....Tested estimated 2,000,000 ft gas 2,344 ft.
Pelican Nat. Gas Co.'s No. 3 Sabine Lbr. Co., 200 ft. S, 200 ft. W, NE cor. SE NW, Sec. 6-7-11.....Bailing 2,237 ft.
D. H. Riddick's No. 1 Scretchfield, 400 ft. E, 400 ft. N, SW cor. NW SE, Sec. 18-9-12.....S.D. 3,280 ft.
H. T. Stacey et al's No. 1 Polly, NE cor. NE NE, Sec. 18-8-12.....Rig up.

TENSAS PARISH

A. R. Willis et al's No. 1 Currey, 1,320 ft. S, 1,320 ft. E, NW cor., Sec. 39-11-12.....S.D. 2,300 ft.

WEBSTER PARISH

J. P. Evans et al's No. 1 Crichton Co., NE cor. NW NE, Sec. 31-18-8.....Drlg. shale 1,208 ft.

ARKANSAS

ASHLEY COUNTY

J. D. Marcum Co.'s No. 1 McGarry, 300 ft. W, 100 ft. S, C, Sec. 10-19-4.....D.S. test 3,555 ft; S.W; plugging back for retest.

CALHOUN COUNTY

Tidal Oil Co.'s No. 1 Freeman-Smith Lbr. Co., 150 ft. CSL, NE NW, Sec. 3-16-14.....D.S. test 2,456-2,506 ft; S.W. 2,488-2,506 ft; dry; S.W. 2,534-49 ft; cored S.W. sand 2,843 ft; drlg. 2,935 ft.

CLEBURNE COUNTY

Cosden Oil Co. of Ark.'s No. 1 Donophan, 100 ft. S, 660 ft. E, NW cor. SW SE, Sec. 19-9-10.....Arranging to set 8¼-in. 3,875 ft.
Donnelly-Craver et al's No. 1 Donophan Lbr. Co., SE cor. NW, Sec. 39-11-9.....S.D. for wtr. 1,575 ft.

COLUMBIA COUNTY

S. Y. Dorfman et al's No. 1 Merritt, 923 ft. S, 160 ft. W, NE cor. SE NW, Sec. 25-19-22.....Cmtd. 12½-in. 165 ft; drlg. 650 ft.

FRANKLIN COUNTY

Red Bank Oil Co.'s No. 1 Edtin, SW cor., Sec. 33-10-26.....Drlg. shale 2,835 ft.

GARLAND COUNTY

Givens et al's No. 1 Garrett, 660 ft. S, 660 ft. W, C, Sec. 1-3-19.....Drlg. lime 3,685 ft.

HOT SPRINGS COUNTY

Anisman et al's No. 1 Hinson est., NE NE, Sec. 19-4-16.....12½-in. 72 ft; 10-in. 200 ft.

J. R. Lockhart's No. 1 Cunningham, 285 ft. S, 285 ft. W, NE cor., Sec. 11-5-16 (reported in Grant County in error) ..... Derrick.

LAFAYETTE COUNTY

Crawford Drlg. Co.'s No. 1 Vaughn, 200 ft. S, 200 ft. W, NE cor. SE NE, Sec. 25-19-25 ..... Rig up.

LINCOLN COUNTY

B. F. Thompson, trustee's No. 1 McGhee, 330 ft. S, 150 ft. W, C, Sec. 8-8-7 ..... Rigging up.

LITTLE RIVER COUNTY

A. L. Buck's No. 1 Greason, NW NW, Sec. 25-12-32 ..... S.D. 2,502 ft.

LOGAN COUNTY

J. H. Flowers' No. 1 J. H. White, Sec. 13-6-26 ..... U.R. 5 3/16-in. 3,570 ft; T.D. 3,610 ft.

MADISON COUNTY

J. W. Baxter's No. 1 Hallem, C NE SW, Sec. 17-16-26 ... S.D. 540 ft.

MILLER COUNTY

Lenz et al's No. 1 G. W. Johnson, 400 ft. S, 400 ft. W, NE cor. SW, Sec. 24-15-26 ..... T.D. 2,849 ft; estimated 65 bbls; arranging to set tubing.

OUACHITA COUNTY

Anderson & Wimmer's No. 1 Buck, Sec. 7-15-7 ..... Sidetracking D.S; T.D. 2,735 ft.
Belmont et al's No. 1 Buck, SE cor. SE SW, Sec. 16-15-17. Cmtd. 12½-in. 120 ft.
A. B. Turner, trustee's No. 1 Dave Brown, 220 ft. N, 220 ft. E, SW cor., Sec. 23-15-18 ..... Rig up.

PIKE COUNTY

E. R. Henderson's No. 1 Tilyou, 660 ft. W, 500 ft. S, NE cor. NE SE, Sec. 26-8-14 ..... Location.

POPE COUNTY

Cosden Oil Co.'s No. 1 Mo. Pac. R.R., 660 ft. N, 660 ft. E, SW cor. NW SE, Sec. 13-9-19 ..... Drlg. hard sand 4,864 ft.

SCOTT COUNTY

Heavener O. & G. Co.'s No. 1 Riser, Sec. 36-4-26 ..... Straightening hole; T.D. 1,530 ft.

SEBASTIAN COUNTY

W. M. Greeson's No. 1 Spears, Sec. 9-7-29 ..... Tested S.W. 3,515 ft; W.O.
Mansfield Gas Co.'s No. 14 fee, Lot 10, Sec. 1-4-31 ..... S.D. for wtr. 380 ft.
Ozark Nat. Gas Co.'s No. 10 Weaver, 660 ft. N, 660 ft. W, SE cor. SE NE, Sec. 27-8-30 ..... Straightening hole; T.D. 2,640 ft.

UNION COUNTY

S. B. Hickman's No. 1 Hogg, 330 ft. S, 150 ft. E, NW cor. SE SE, Sec. 35-16-17 ..... Dry 1,987-2,079 ft; fish. 2,157 ft.
Marine Oil Co.'s No. 4-A Thompson, 330 ft. N, 330 ft. W, SE cor. SW NE, Sec. 10-18-13 ..... Tested 5,000,000 ft. dry gas 3,548-51 ft; set 6⅝-in; T.D. 3,554 ft.
Modisette Drlg. Co.'s No. 4 Union Sawmill, 330 ft. W, 300 ft. N, SE cor., Sec. 14-18-14 ..... Location.
South El Dorado Oil Co.'s No. 1 Traylor, 330 ft. N, 138 ft. W, SE cor. NW NE, Sec. 9-19-15 ..... W.O.S.R; 700 ft. fluid; T.D. 2,186 ft.

VAN BUREN COUNTY

Glenn Kohle et al, trustee's No. 1 Scalan, 200 ft. S, 200 ft. W, NE cor. SE NW, Sec. 5-19-13 ..... S.D. 50 ft.

WASHINGTON COUNTY

Delbert & Graves' No. 1 Cunningham, Sec. 14-15-32 ..... S.D; W.O. 602 ft.
C. H. Willoughby's No. 1 Jones, Sec. 34-16-30 ..... S.D; W.O. 1,650 ft.
Lincoln Leaseholding Synd.'s No. 1 Lincoln, Sec. 30-15-32. U.R. 8-in. to T.D. 1,500 ft.
H. H. Taylor et al's No. 1 Runny, C NE SW, Sec. 1-13-19. S.D. for wtr. 700 ft.

YELL COUNTY

Tegmeier & Luckett's No. 1 Falcon, Sec. 36-7-21 ..... Sidetracking 5 3/16-in. 4,120 ft; T. D. 4,160 ft.

EAST TEXAS

BOWIE COUNTY

Lee Timberlake's No. 1 Tidwell, 2,800 ft. N, 300 ft. W, SE cor., Jos. Eskell Sur. ..... S.D. repairs; 2,330 ft.

CAMP COUNTY

McDonald Bros.' No. 1 Tillery, 150 ft. E, 450 ft. S, NW cor. 127-ac. tract, in J. H. Murphy Sur. ..... Location.
Rogers et al's No. 1 Enfelt, R. M. Montgomery Sur. .... T.A. 3,045 ft.

CASS COUNTY

Phillips Pet. Co.'s No. 1 J. R. Olds, 300 ft. N, 170 ft. E, SW cor., J. A. Stephenson Sur. ..... Rig up.

MARION COUNTY

W. D. Chew's No. 1 fee, 2,350 ft. W, 1,275 ft. N, SE cor., W. J. Hamilton Sur. ..... Drlg. hard shale 2,400 ft.
P. E. Hussey's No. 1 A. A. Trammell, Chas. Lockhart Sur. ..... Drlg. shale 1,217 ft.

RED RIVER COUNTY

D. M. Buffington's No. 1 Hossler, E. Hughhart Sur. .... S.D. 2,865 ft.
Johnson Pet. Co.'s No. 2 Randolph, Edw. Dean Sur. .... Swedging; 2 joints collapsed 8-in; arranging to cmt. 6⅝-in. and packer 2,182 ft.

SABINE PARISH

Benedum & Trees Oil Co.'s No. 1 Nona Mills Lbr. Co., Jas. Mason Sur. ..... Derrick.

SHELBY COUNTY

Chapperall Oil Co.'s No. 2 Holt, Matthew Moore Sur. .... Coring hard lime 5,350 ft.

MISSISSIPPI

ADAMS COUNTY

A. C. Glassell et al's No. 1 Artonish, 75 ft. S, 75 ft. W, NE cor., Sec. 29-8n-2w ..... Began drlg. July 2; cmtd. 12½-in. 246 ft.

ALCORN COUNTY

Alcorn Pet. Co.'s No. 1 Matthews, SE cor., Sec. 14-2s-7e. Fishing 6-in. and tools 2,392 ft; T.D. 2,735 ft.

CHICKASAW COUNTY

Hightower & Golson's No. 1 Flemming, NE cor., Sec. 20-13-3 ..... Fishing 8¼-in. csg. 1,414 ft.

HINDS COUNTY

Oscar Brown's No. 1 Riverside (formerly Hennessee et al's), SE cor. SE SW, Sec. 23-16-5 ..... Set 12½-in. 30 ft; S.D. 1,050 ft.
Cane River Oil Co.'s No. 1 Lufkin, Sec. 15-5-1e ..... Cmtd. 6⅝-in. top chalk 2,465 ft; T.D. 2,467 ft.
Capital O. & G. Co.'s No. 1 Brown, SW SE, Sec. 28-6-1e. Drlg. 2,300 ft.
Capital O. & G. Co.'s No. 1 Clark, Sec. 10-5-1e ..... Began drlg. July 21.
Dome Oil Co.'s No. 1 Elton, NE cor. SE SW, Sec. 5-4-1e. Drlg. 2,463 ft.
Interior Oil Co.'s No. 1 Belhaven Heights, 1,165 ft. W, 614 ft. S, NE cor., Sec. 2-5-1e ..... Derrick.
Jackson Oil Co.'s No. 1 Central Cotton Oil Co., NW cor. SW NW, Sec. 3-5-1e ..... Rig up.
Jackson O. & G. Co.'s No. 1 Capital Land & Inv. Co., Sec. 29-6-1e ..... Drlg. 2,179 ft.
Love Bros.' (was Love O. & G. Co.'s) No. 1 Bridges-Hilzim, 870 ft. N, 920 ft. W, SE cor., Sec. 35-6-1e .... S.D. 240 ft.
Love O. & G. Co.'s No. 1 Gordon, SW cor. SW NW, Sec. 8-5-1e ..... Cmtd. 6⅝-in. 2,448 ft; drlg. plug.
Marine O. & G. Co.'s No. 1 Country Club, NW cor., Sec. 31-6-1e ..... Ratholing at 2,493 ft. in Wilcox.
Mrs. Reeder et al's No. 1 State, SE cor. NW NW, Sec. 25-6-1e ..... W.O; T.D. 2,905 ft.
Tri-State O. & G. Co.'s No. 1 Wilson, SW cor. SE NE, Sec. 23-6-1e ..... Derrick.
J. A. Weir et al's No. 1 Holliday & Ross, NW SE, Sec. 8-6-2e ..... Drlg. 1,900 ft.

HUMPHRIES COUNTY

E. S. Steele et al's No. 1 C. B. Box, SE cor. SE NE, Sec. 25-14-4w ..... Set 12½-in. 60 ft; S.D.

LAUDERDALE COUNTY

Lauderdale O. & G. Co.'s No. 1 Lackey, 990 ft. S and E, NW cor. NE, Sec. 2-7-16 ..... Tested S.W. 3,252 ft; S.D. 3,420 ft.
Meridian O. & G. Co.'s No. 1 Hauser, Sec. 33-8-18 ..... S.D; W.O; sandy shale 2,826 ft.
J. R. Smith Oil Co.'s No. 1 C. F. Craig, Sec. 2-16-14 .... Derrick.

LAFAYETTE COUNTY

Banks-Goode et al's No. 1 May, 113½ rds. S, 26 rds. E, NW cor. SW, Sec. 22-10-1w ..... Derrick.

LINCOLN COUNTY

Lincoln O. & G. Co.'s No. 1 Pat Case, NE cor. NE, Sec. 31-3-6 ..... S.D; W.O. 2,231 ft.

MADISON COUNTY

Barney Kennedy et al's No. 1 Raymond, 300 ft. E, 1,800 ft. N, SW cor., Sec. 32-7-2e ..... Rig up; W.O.

MONROE COUNTY

Amory Dev. Co.'s No. 1 Bourland, Sec. 3-13-19 ..... S.D. 2,912 ft; bailer lost in hole.
Amory Pet. Co.'s No. 1 Hall, Sec. 8-13-19 ..... Shot 2,402-18 ft; small S.O.; arranging to shoot 2,387-95 ft.
Park Bowser et al's No. 1 Cowart, second hole, Sec. 2-12-19 ..... S.D. 30 ft.

RANKIN COUNTY

Gulf Ref. Co.'s No. 1 Rainey, NW NW, Sec. 13-5-1e ..... Cmtd. back to 2,500 ft; drlg. plug; no gauge of volume; rock pressure 450 lbs; old T.D. 3,607 ft.
R. A. Moore et al's No. 1 Interior Lbr. Co., Sec. 28-6-1e. S.D. 900 ft.
Interior Oil Co.'s No. 1 Moore, 660 ft. N, 660 ft. W, SE cor. NW NW, Sec. 28-6-2e ..... S.D. 900 ft.
Jackson O. & G. Co.'s No. 1 Patton, 330 ft. N, 330 ft. W, SE cor. SE NW, Sec. 17-5-1e ..... Began drlg. July 16; S.D. bldg wtr. line.
Ohio Oil Co.'s No. 1 Payne, NW cor. SE NE, Sec. 12-5-1e ..... Location.
Pearl River O. & G. Co.'s No. 1 Marter, 900 ft. N, 200 ft. W, SE cor. SW NW, Sec. 12-5-1e ..... Estimated 10,000,000 ft. gas and flowing sulphur wtr. by heads; 6 ft. chalk; T.D. 2,478 ft.

WARREN COUNTY

El Dorado Oil Co.'s No. 1 Dornbush, Sec. 8-18-15 ..... S.D. 2,475 ft.; 2,350 ft. D.S. in hole; W.O.

WILKINSON COUNTY

A. C. Glassell et al's No. 1 Stowers, 31.4 chains W, 27.2 chains S, NE cor., Sec. 29-8-2w ..... Cmtd. 12½-in. 465 ft.

YALOBUSHA COUNTY

Carter Oil Co. and J. W. Collett's No. 1 Blackmur, 330 ft. S, 990 ft. W, Sec. 14-11-4 ..... Fishing slip; T.D. 2,215 ft.

YAZOO COUNTY

Amerada Pet. Corp.'s No. 1 Doherty, SW SW, Sec. 24-12-2 ..... Drlg. sandy lime 5,133 ft.

ALABAMA

LAMAR COUNTY

Griggs & Knapp's No. 1 Wefel, Sec. 25-12-14 ..... T.A. 1,740 ft.

LAUDERDALE COUNTY

A. D. Morton et al's No. 10 O'Neal est., Sec. 8-2s-13w .... Cmtd. 12½-in. 125 ft.; drlg. hard lime 905 ft.

MARION COUNTY

Hobson et al's No. 1 John Clark, SE, Sec. 29-11-14 ..... Derrick pattern.

WASHINGTON COUNTY

S. A. Hobson's No. 1 Hobson Bros., Sec. 9-8-2 ..... S.D.; W.O.; flow at 1,450 ft.
S. A. Hobson's No. 1 Wilson, Sec. 27-7-1 ..... Fishing bailer; T.D. 881 ft.
Oscar Brown's No. 2 Land & Cotton Co., Sec. 25-3-2w .. Drlg. 700 ft.

GULF COAST FIELDS AND WILDCATS

(Continued from Page 59)

Humble & Valley's No. 6 Woodley ..... Derrick.
Humble & Valley's No. 7 Woodley ..... Derrick.
Humble & Valley's No. 8 Woodley ..... Derrick.
Humble & Valley's No. 9 Woodley ..... Derrick.

DE WALT—FORT BEND COUNTY

Humble Oil & Ref. Co.'s No. 6 Camp ..... Drlg. sandy shale 3,394 ft.

HUMBLE—HARRIS COUNTY

John Deering's No. 1 Graf ..... No report.
LaRue, trustee's No. 1 Crane, northwest ..... Derrick.
Rio Bravo Oil Co.'s No. 4 fee, southwest ..... Drlg. plug 3,890 ft.
Rio Bravo Oil Co.'s No. 5 fee, west ..... Drlg. gumbo 1,098 ft.
Rio Bravo Oil Co.'s No. 6 fee, west ..... Rig.
Rio Bravo Oil Co.'s No. 1 H.&W.T., west ..... Waiting cement 4,243 ft.
South Texas Pet. Co.'s No. 15 Morris, south ..... Swabbed dry 5,152 ft.; pulling screen to deepen.
Sun Oil Co.'s No. 9 Bender, west ..... Sand and shale 3,908 ft.; comp. flowing 675 bbls. pipe line oil.
Sun Oil Co.'s No. 10 Bender, west ..... Oil sand 4,425 ft.; cem. 7-in. casing 4,325 ft.
Sun Oil Co.'s No. 11 Bender, west ..... No report.
Sun Oil Co.'s No. 12 Bender, west ..... Total depth 4,030 ft.; cem. 7-in. casing 4,000 ft.
Sun Oil Co.'s No. 49 River, north ..... Total depth 4,486 ft.; strengthening hole.
Trapshooter Riley's No. 1 Long John Jones ..... No report.
The Texas Company's No. 2 Atlantic & Gulf, east ..... Rig.
The Texas Company's No. 1 fee ..... Oil sand 3,981-90 ft.; to test.
The Texas Company's No. 25 House, northeast ..... Location.
The Texas Company's No. 43 Stevenson, east ..... Location.
The Texas Company's No. 23 Wheeler and Pickens, northeast ..... Drlg. shale 5,552 ft.
West Production Co.'s No. 3 Foster, north ..... Drlg. 2,019 ft.

BLUE RIDGE—FORT BEND COUNTY

Gulf Production Co.'s No. 18 Luscher, south ..... Drlg. sand and shale 3,862 ft.

PIERCE JUNCTION—HARRIS COUNTY

Gulf Production Co.'s No. 1 Manchester Corp. ..... Drlg. gumbo and lime 2,749 ft.
Navarro Oil Co.'s No. 4-A Cain ..... Total depth 6,245 ft.; sidetracked to 4,544 ft.; comp. flowing 700 bbls.
Rio Bravo Oil Co.'s No. 14-A Settegast ..... Fishing.
Rio Bravo Oil Co.'s No. 20-A Settegast ..... Rig.
Saxet Oil Co.'s No. 8 Herman estate ..... Location.

LIBERTY—LIBERTY COUNTY

Empire Gas & Fuel Co.'s No. 13 O'Brien ..... Oil sand 3,583 ft.; cem. casing.
The Texas Company's No. 7 Green, northwest ..... Drlg. hard shale 4,394 ft.

BIG CREEK—FORT BEND COUNTY

Gulf Prod. Co.'s No. 49 Davis (workover) ..... Comp. flowing 1,200 bbls. 3,851 ft.
Gulf Production Co.'s No. 59 Davis ..... Oil sand 3,696 ft.; cem. casing.
Navarro Oil Co.'s No. 5 Davis ..... Location.

LOST LAKE—CHAMBERS COUNTY

Pure Oil Co.'s No. 5 Lost Lake ..... Fishing 3,925 ft.

NASH—BRAZORIA COUNTY

Rycade Oil Corp.'s No. 27 Wisdom ..... Drlg. hard sand and lime 4,259 ft.

SOUR LAKE—HARDIN COUNTY

The Texas Company's No. 306 Texas Co. fee ..... Comp. pumping 200 bbls. 2,143 ft.

SARATOGA—HARDIN COUNTY

Rio Bravo Oil Co.'s No. 93-A Cotton ..... Derrick.
Rio Bravo Oil Co.'s No. 95-A Cotton ..... Comp. pumping 100 bbls. 529 ft.

GOOSE CREEK—HARRIS COUNTY

Humble Oil & Ref. Co.'s No. 78 Simms-Smith ..... Drlg. sand rock and shale 4,205 ft.

SPINDLETOP—JEFFERSON COUNTY

Yount Lee Oil Co.'s No. 19 McFaddin (workover) ..... Comp. flowing 960 bbls. 3,530 ft.
Yount Lee Oil Co.'s No. 138 McFaddin ..... No report.
Yount Lee Oil Co.'s No. 139 McFaddin ..... No report.
Yount Lee Oil Co.'s No. 140 McFaddin ..... No report.

NORTH DAYTON—LIBERTY COUNTY

Victor Oil Co.'s (V. H. Borsodi) No. 2 Gulf ..... Drlg. sand, shale and lime 4,350 ft.
Saxet Oil Co.'s No. 1 Davis, north ..... Drlg. sand and shale 3,787 ft.
Saxet Oil Co.'s No. 3 Wilhite ..... Location.
Harrison Oil Co.'s No. 1 Gulf fee ..... Drlg. gumbo 1,257 ft.

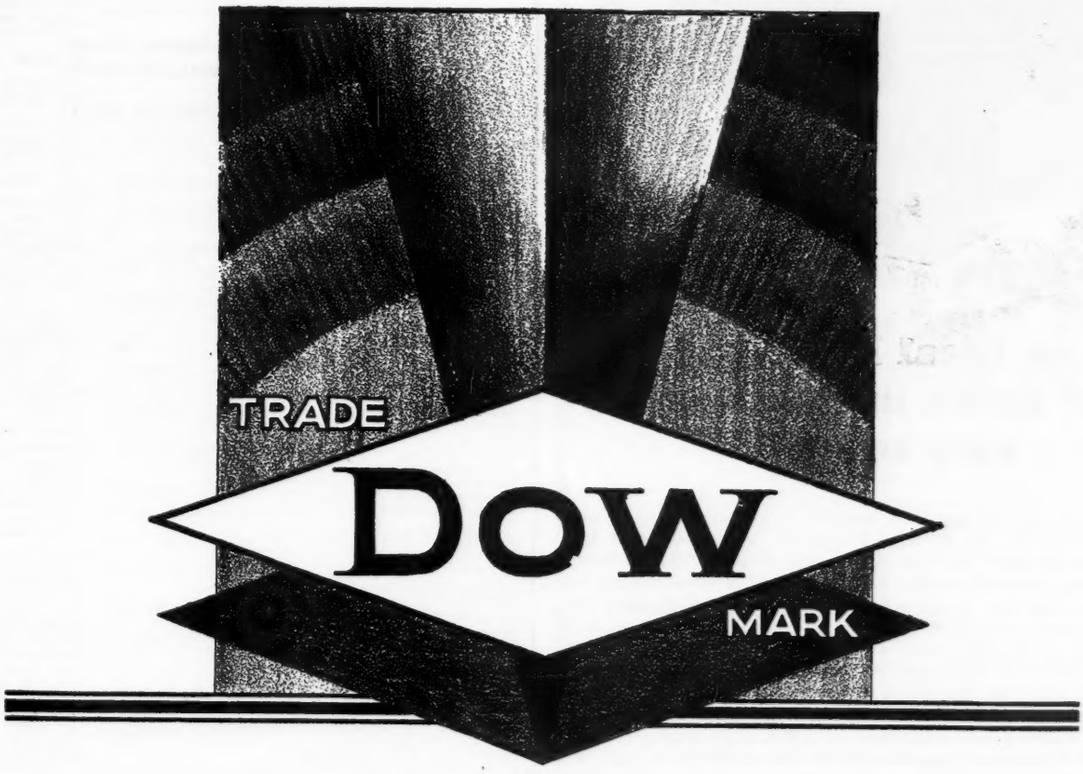
HIGH ISLAND—GALVESTON COUNTY

Gulf Production Co.'s No. 10 Smith ..... Drlg. hard sand 4,472 ft.
Marrs McLean's No. 18 Cade ..... Total depth 4,177 ft.; side tracking 1,841 ft.
Marrs McLean's No. 19 Cade ..... Rig.

ORCHARD—FORT BEND COUNTY

Gulf Production Co.'s No. 23 Moore ..... Comp. flowing 500 bbls. fluid, 1% per cent water, 5/16-in. choke 4,133 ft.

CARBON TETRACHLORIDE



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Here's an Ideal Drilling Outfit for quick moving and easy set-ups

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The machine is equipped with a telescopic shaft so that the drill can be moved back from the drill hole when hoisting rods. A flexible coupling on the shaft takes care of any variation in the alignment of the drill and motor, thus relieving the bearings of all undue wear.

Proper drill speed is obtained through two machine-cut gears. All controls are within easy reach of the operator. A spool hoist driven by the main drill shaft is useful in sinking standpipe or surface conductor.

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E. J. LONGYEAR COMPANY
MINNEAPOLIS, MINNESOTA

Longyear

Gulf Production Co.'s No. 24 Moore ..... Comp. flowing 800 bbls. oil on ½-in. choke 4,038 ft.
Gulf Production Co.'s No. 25 Moore ..... Location.
Gulf Production Co.'s No. 26 Moore ..... Location.

HULL—LIBERTY COUNTY

Republic Production Co.'s No. 75 Dolbear ..... Deepened to 2,897 ft.; pumping 100 bbls.
The Texas Company's No. 2 Barrow ..... Set 3-inch strainer 3,866 ft.

PORT NECHES—ORANGE COUNTY

Gulf Production Co.'s No. 1 W. H. Starks ..... Drlg. hard sand and shale 5,395 ft.
The Texas Company's No. 2 Stark ..... Swabbing salt water and oil 4,598 ft.

CLAY CREEK—WASHINGTON COUNTY

Sun Oil Co.'s No. 5 Hunt ..... Rig.
Sun Oil Co.'s No. 4 Janner ..... Drlg. shale 2,617 ft.

ESPERSON—LIBERTY COUNTY

Cranfill-Reynolds Oil Co.'s No. 5 Davis ..... Drlg. gumbo 1,312 ft.
Cranfill-Reynolds Oil Co.'s No. 14 Esperson ..... Comp. pumping 200 bbls. 3,255 ft.
Cranfill-Reynolds Oil Co.'s No. 15 Esperson ..... Rigging up to pump 3,298 ft.
Cranfill-Reynolds Oil Co.'s No. 16 Esperson ..... Rig.
Cranfill-Reynolds Oil Co.'s No. 4 Moores Bluff ..... Drlg. rock 776 ft.
Yount Lee Oil Co.'s No. 3 Moores Bluff ..... Drlg. shale 7,415 ft.

HANKAMER—LIBERTY COUNTY

Gulf Production Co.'s No. 1 Ezzell ..... Drlg. shale 3,740 ft.

WEST COLUMBIA—BRAZORIA COUNTY

Anderson et al's No. 1 Smith & Brooks ..... Total depth 3,255 ft.; set 14 ft. 4½-in. screen; bailing oil and salt water.

ORANGE—ORANGE COUNTY

Sun Oil Co.'s No. 7 Gunstream ..... No report.

BOLING—WHARTON COUNTY

C. S. Thomas' No. 1 Volney ..... Shut down 235 ft.
C. S. Thomas' No. 1 Taylor ..... Drlg. sandy shale 1,315 ft.

REFUGIO—REFUGIO COUNTY

Houston Oil Co.'s No. 3 Ryals ..... Comp. flowing 120 bbls. 3,657 ft.
Houston Oil Co.'s No. 1 Rooke ..... Drlg. sandy shale 2,427 ft.
Houston Oil Co.'s No. 1 City, Block 59 ..... Drlg. sticky shale and lime 5,217 ft.
Houston Oil Co.'s No. 1 O'Connor ..... Drlg. sticky shale and lime 3,328 ft.
Houston Oil Co.'s No. 1 West ..... Drlg. gumbo 6,182 ft.
Houston Oil Co.'s No. 1 Rose Lambert ..... Drlg. sand 5,910-17 ft.
Houston Oil Co.'s No. 2 Rose Lambert ..... Drlg. shale 5,876 ft.
Houston Oil Co.'s No. 7 Fannie Heard (workover) ..... Total depth 3,718 ft.; plugged to 3,680 ft.
Houston Oil Co.'s No. 1 Johnson, Block 63 ..... Drlg. gumbo 4,419 ft.
Independent Oil Gas Co.'s No. 1 Rose Lambert ..... Drlg. sandy shale 1,434 ft.
Independent Oil & Gas Co.'s No. 6 Jerry Reilly (workover) ..... Oil sand 6,447-58 ft.; cem. 6⅝-in casing.
Edwin M. Jones' No. 3-A J. F. B. Heard ..... Fishing swab 3,649 ft.
Luling Oil & Gas Co.'s No. 1 J. W. Kay ..... Drlg. sandy lime 3,901 ft.
Luling Oil & Gas Co.'s No. 1 West ..... Drlg. sticky shale and gumbo 1,896 ft.
Mission Drilling Co.'s No. 1 Moss-Heard, Blk. 11 ..... Drlg. hard sand lime 4,228 ft.
Mission Drilling Co.'s No. 1 O'Brien (workover) ..... Standing 5,471 ft.
Moody-Seagraves Prod. Co.'s No. 2 O'Brien ..... Oil sand 5,690-95 ft.; cem. 6¼-in casing.
Mission Drilling Co.'s No. 1 Joe Shay, Block 6 ..... Swabbing 5,477 ft.
Moody-Seagraves Prod. Co.'s No. 1-A O'Brien ..... Derrick.
Moody-Seagraves Prod. Co.'s No. 3 O'Brien ..... Derrick.
Moody-Seagraves Prod. Co.'s No. 1 Strauch, Block 64 ..... Set 15-ft. screen 5,629 ft.
Moody-Seagraves Prod. Co.'s No. 1-A St. John ..... Sticky shale 1,455 ft.; temporarily shut down.
Morgan Oil Corp.'s No. 2 O'Connor ..... Coring gas sand 6,427 ft.
Pearson Properties, Inc.'s No. 1 Hornburg ..... Derrick.
Pearson Proptrties, Inc.'s No. 3 Ryals ..... Lime and boulders 4,019 ft.; fishing drill pipe.
Pittsburg Refugio Oil Co.'s No. 2 Terrell ..... Drlg. shale 1,780 ft.
Ed Price's No. 1 Mission River ..... Tc pump 3,663 ft.
Saxet Oil Co.'s No. 12 Clint Heard ..... Drlg. shale and lime 6,277 ft.
Saxet Oil Co.'s No. 1 Kay ..... Sticky shale 5,282 ft.; fishing drill pipe.
Saxet Oil Co.'s No. 2 Ryals (workover) ..... Drlg. gumbo and shale 6,268 ft.
Saxet Oil Co.'s No. 3 Ryals ..... Drlg. shale lime 4,900 ft.
L. L. Smith's No. 1 Sumner ..... Set 7-ft. screen 5,471 ft.; comp. flowing 250 bbls.
Stroube & Stroube's No. 1 City, Lot 15, Blk. 4 ..... Drlg. shale 1,950 ft.
The Texas Company's No. 2 Ben Shelton ..... Set screen 5,467 ft.; comp. flowing 300 bbls.
C. A. Tucker's No. 1 Empson ..... Drlg. sticky shale 2,504 ft.
Union Producing Co.'s No. 5 O'Brien ..... Comp. as small producer
Union Producing Co.'s No. 6 O'Brien ..... Derrick.
Union Producing Co.'s No. 5 Powers ..... Location.
Union Producing Co.'s No. 5 Mitchell ..... Rig.
Union Producing Co.'s No. 2 Eskridge-Heard ..... Set screen 3,684 ft.

SOUTH LOUISIANA FIELDS
LOCKPORT—CALCASIEU PARISH

Union Sulphur Co.'s No. 2 Moss ..... Tested salt water 5,055 ft.; pulling screen to deepen.
Union Sulphur Co.'s No. 1 Martha Moss ..... Drlg. sticky shale 4,976 ft.
Vacuum Oil Co. and Gulf Ref. Co.'s No. 28 Miller ..... Drlg. sticky shale 4,374 ft.
Vacuum Oil Co.and Gulf Ref. Co.'s No. 29 Miller ..... Rig.
Vacuum Oil Co. and Gulf Ref. Co.'s No. 5 Freiberg & Wolf ..... Abandoned 5,681 ft.
Vacuum Oil Co.'s No. 6 Bayou State ..... Drlg. sand 115 ft.
Yount Lee Oil Co.'s No. 1 Miller ..... Drlg. hard sandy lime 5,964 ft.

HACKBERRY—CAMERON PARISH

Calcasieu Oil Co.'s No. 20 Watkins ..... Total depth 2,781 ft.; cem. 6⅝-in casing 2,762 ft.
Calcasieu Oil Co.'s No. 6 Caldwell ..... Spudded.
Duhon Oil Mineral Co.'s No. 1 Koonce ..... Shut down 140 ft.
Federal Petroleum Co.'s No. 1 Hebert ..... Drlg. broken lime and shale 6,389 ft.
The Texas Company's No. 7 State ..... Drlg. hard shale and lime 2,074 ft.
Yount Lee Oil Co.'s No. 31 State ..... Drlg. sand 615 ft.
Yount Lee Oil Co.'s No. 2 Portia ..... Rig.

JENNINGS—ACADIA PARISH

Fun'ce Oil Co.'s No. 2 Crowley, west ..... Set 15-ft. screen 4,146 ft.
Kathleen Oil Co.'s No. 2 Syndicate Clements ..... Location.
The Texas Company's No. 5 Rayne heirs, King tract ..... Abandoned in heaving shale 8,794 ft.
Yount Lee Oil Co.'s No. 9 Housierre Latrielle ..... Drlg. hard sand 6,201 ft.
Yount Lee Oil Co.'s No. 7 Crowley ..... Spudded.

VINTON—CALCASIEU PARISH

Gulf Refining Co.'s No. 4 Gardner ..... Drlg. gumbo and lime 2,736 ft.
Supreme Oil Co.'s No. 2 Gray ..... Drlg. 2,167 ft.
Vinton Petroleum Co.'s No. 3 Gray (workover) ..... Drlg. 3,279 ft.
Vinton Petroleum Co.'s No. 9 Gray ..... Rig.
Wilson-Broach's No. 4 Wilson ..... Drlg. 917 ft.
Vinton Petroleum Co.'s No. 8 Gray ..... Total depth 3,276 ft.; comp. flowing 350 bbls.

BAYOU BOUILLON—ST. MARTIN PARISH

Rycade Oil Corp.'s No. 1 Woodyard Lake ..... Drlg. sand and lime rock 5,385 ft.
Rycade Oil Corp.'s No. 4 State ..... Location.

STARKS—CALCASIEU PARISH

Adams Oil Co.'s No. 1 Roderick ..... No report.
J. O. Davis' No. 1 Industrial ..... Standing 3,775 ft.
Gulf Refining Co.'s No. 24 Starks ..... Cem. casing to test 1,098 ft.
J. G. Sutton et al's No. 1 Industrial ..... Spudded.

SWEET LAKE—CAMERON PARISH

Magnolia Petroleum Co.'s No. 1 Sweet Lake ..... Drlg. shale 5,400 ft.

ANSE LA BUTTE—ST. MARTIN PARISH

Yount Lee Oil Co.'s No. 2 Herbert ..... Drlg. hard rock 6,035 ft.

PORT BARRE—ST. LANDRY PARISH

Pure Oil Co.'s No. 1 Perkins ..... Drlg. rock 3,735 ft.

EDGERLY—CALCASIEU PARISH

Associated Oil Co.'s No. 5 Paraffine ..... Total depth 3,070 ft.; cem. 6⅝-in casing 3,050 ft.

Rex Petroleum Co.'s No. 12 Hunter ..... Drlg. hard sand 3,900 ft.

MISCELLANEOUS WILDCATS

TEXAS

AUSTIN COUNTY

O'Hara et al's No. 1 Batla, near Raccoon City ..... Abandoned 4,000 ft.

BRAZORIA COUNTY

The Texas Company's No. 1 Ewin, Harvey Little Sur. .... Total depth 6,555 ft.; reaming.
Mills Bennett Production Co.'s No. 1 Random, Allen .... Total depth 5,363 ft.; standing.
Mills Bennett Production Co.'s No. 1 Reese, Allen ..... Drlg. shale and lime 3,235 ft.
Mills Bennett Production Co.'s No. 1 Poole, Allen ..... Drlg. cap rock 1,806 ft.
Mills Bennett Production Co.'s No. 2 Allen ..... Rig.
Faust et al's No. 5 Faust ..... Drlg. hard lime 4,861 ft.
Freeport Sulphur Co.'s No. 2,001 fee, Bryan Heights ... Drlg. shale 2,424 ft.
Rucks & Patterson's No. 1 Hunter, southwest of Hoskins.. Total depth 1,180 ft.; sidetracked to rock 968 ft.; shut down.
Rycade Oil Corp.'s No. 1 Rapid City, Henry Austin Sur.. Abandoned 5,284 ft.
Rycade Oil Corp.'s No. 1 Seaburn, Stratton Ridge ..... Coring sandy shale 1,794 ft.
Rycade Oil Corp. and Vacuum Oil Co.'s No. 1 Wisdom, Lake Jackson ..... Rig.
Shell Petroleum Corp.'s No. 4 Blakely-Danbury ..... Coring water sand 1,768 ft.
Steel & Strickland's No. 1 Lockridge ..... Spudded and shut down.
United Oil Syndicate's No. 1 Moores, Francis Moore Sur... Shut down 1,462 ft.

CALHOUN COUNTY

The Texas Company's No. 1 Thomas, J. P. Tilley Sur. .. Drlg. sticky shale 4,500 ft.

CHAMBERS COUNTY

Chicago Oil Corp.'s No. 1 Lawrence ..... Total depth 3,948 ft.; cemented casing.
Shell Petroleum Corp.'s No. 2 Herff, Moss Bluff ..... Location.
Pure Oil Co.'s No. 1 J. H. K. Ranch, Oyster Bayou .... Total depth 4,125 ft.; drlg. water well.
Superior Oil Corp.'s No. 1 Jackson ..... Abandoned 4,382 ft.
The Texas Company's No. 1 Jackson, T.&N.O. Sur., Sec. 17 ..... Drlg. sandy shale 4,200 ft.

GRIMES COUNTY

Deering et al's No. 1 Munker, Darius Gregg Sur. ..... Rig.
Deering & Noble's No. 1 Templeman, 6 miles south Navasota ..... Drlg. shale 2,727 ft.

HARDIN COUNTY

D. O. Speights' No. 1 fee, near Batson ..... Shut down 2,745 ft.

HARRIS COUNTY

Baldwin and associates' No. 1 Kitzman, Cypress ..... Shut down 4,247 ft.
Gulf States Oil Co.'s No. 1 Angsperger ..... Drlg. shale 559 ft.
Humble Oil & Ref. Co.'s No. 8 Warren, Hockley ..... Drlg. hard sand 823 ft.
Humble Oil & Ref. Co.'s No. 2 Minnetex, Mykawa ..... Drlg. sand rock 3,635 ft.
Mission Drilling Co.'s No. 1 E. Cook ..... Blue gumbo 2,280 ft.; abandoned.
Mission Drilling Co.'s No. 2 Cook, H. A. Reed Sur. ..... Location.

JACKSON COUNTY

Jackson County Oil Syndicate's No. 8 Drushell, Edna ... Drlg. sand and lime 3,578 ft.
Jackson County Oil Syndicate's No. 2 Lee ..... Drlg. 3,205 ft.
The Texas Company's No. 1 C. A. Mitchell, G. Ewing Sur. ..... Shale 6,176 ft.; reaming.

JEFFERSON COUNTY

Deep Test Oil Co.'s No. 1 McFaddin, Chaisson Sur. ..... Drlg. hard lime 4,844 ft.
Westbury Oil Co.'s No. 1 West, Choate Sur. ..... Drlg. sand and shale 4,012 ft.

LIBERTY COUNTY

Gulf Production Co.'s No. 2 McFaddin, Moss Bluff ..... Drlg. gumbo 2,943 ft.
Humble Oil & Ref. Co.'s No. 1 Breeding, Moss Bluff .... Rig.
Humble Oil & Ref. Co.'s No. 1 Orlando Hylton, Moss Bluff ..... Rig.
Humble Oil & Ref. Co.'s No. 1 Sergent, Moss Bluff ..... Location.
Tucker et al's No. 1 Bell, Devers ..... Derrick.

MATAGORDA COUNTY

Empire Gas & Fuel Co.'s No. 1 Boker, Citrus Grove ..... Drlg. sandy shale 2,353 ft.

MONTGOMERY COUNTY

Price & Whitehead's No. 2 Guerges ..... No report.

REFUGIO COUNTY

Blanco Oil Co.'s No. 1 Dorman ..... Drlg. sticky shale and lime 3,085 ft.

VICTORIA COUNTY

Houston Oil Co.'s No. 1 McFaddin, C. O. Edwards Sur.... Rig.
The Texas Company's No. 1 McFaddin, H. Bonny Sur. ... Drlg. sticky shale 3,144 ft.
Lion Oil & Ref. Co.'s No. 2 McFaddin, M. Traviers Sur.. Total depth 4,032 ft.; cem. 8¼-in. casing 4,012 ft.
Newton et al's No. 1 West ..... Shut down 1,550 ft.

WALKER COUNTY

Texas State Oil Co.'s No. 2 Foils, H.&T.C. Sur., Abstract 287 ..... Drlg. gumbo 3,859 ft.

WALLER COUNTY

Kirby Pet. Co.'s No. 2 Rogers, San Felipe ..... Abandoned in anhydrite 3,432 ft.
W. P. Morris' No. 1 Chapman, Donoho Sur. ..... Fishing 2,966 ft.

WASHINGTON COUNTY

W. Birdwell's No. 1 Schram, James Walker Sur. ..... Shut down 2,110 ft.
Clifton et al's No. 1 Pruiss, E. Alcorn Sur. ..... Shut down 1,610 ft.

SOUTH LOUISIANA

ACADIA PARISH

Charles P. Siess' No. 1 Roller, Sec. 8-9s-1e ..... Drlg. sand and shell 4,630 ft.

CALCASIEU PARISH

Wilfred Lahay's No. 1 J. J. Jardell ..... Location.
Wilfred Lahay's No. 2 James ..... Standing 3,970 ft.

CAMERON PARISH

Shell Petroleum Corp.'s No. 15 Watkins, Black Bayou ... Rig.
Shell Petroleum Corp.'s No. 1 State, Black Bayou ..... Drlg. hard sand and shale 2,683 ft.
Vacuum Oil Co.'s No. 1 Cameron Meadows, Sec. 21-14s-13w ..... Drlg. shale 4,378 ft.
The Texas Company's No. 6 State, Calcasieu Lake ..... Rigging up.

IBERIA PARISH

Lake Oil Co.'s No. 1 Ben White, Sec. 54-12s-7e ..... Drlg. sand 2,576 ft.
Jefferson Lake Oil Co.'s No. 7 Lake Peigneur, Jefferson Lake ..... No report.
Jefferson Lake Oil Co.'s No. 8 Lake Peigneur, Jefferson Lake ..... No report.
The Texas Company's No. 5 Vermillion Bay ..... Drlg. black shale 5,810 ft.

IBERVILLE PARISH

Shell Petroleum Corp.'s No. 5 Wilbert, White Castle .... Coring sticky shale and lime 3,832 ft.
Standard Oil Co.'s No. 5 Wilbert, Bayou Blue ..... Trying to set screen 1,735 ft.
Standard Oil Co.'s No. 7 Wilbert ..... Derrick.
Standard Oil Co.'s No. 8 Wilbert ..... Drlg. gumbo 2,045 ft.
Standard Oil Co.'s No. 1 E. B. and S. P. Schwing, Bayou Blue ..... Driving piling.
Standard Oil Co.'s No. 1 Baist Cooperage, Bayou Blue . Rig.
Standard Oil Co.'s No. 2 Case, Bayou Des Glaise ..... Location.

JEFFERSON PARISH

Humble Oil & Ref. Co.'s No. 1 Delaware, Sec. 2-16s-23e. Total depth 1,960 ft.; no report.

JEFFERSON DAVIS PARISH

Shell Petroleum Corp.'s No. 1 Heyd, Iowa ..... Location.
Vacuum Oil Co.'s No. 1-A DeVilbiss, Roanoke ..... Rig.

LAFAYETTE PARISH

Pure Oil Co.'s No. 1 Marmetin, Carenero ..... Total depth 5,916 ft.; shut down for repairs.

LA FOURCHE PARISH

The Texas Company's No. 1 Leesville ..... Total depth 5,448 ft.; trying to sidetrack 2,638 ft.

PLAQUEMINE PARISH

Humble Oil & Ref. Co.'s No. 1 Lake Washington, Lake Grand Ecaille ..... Abandoned 5,440 ft.
Humble Oil & Ref. Co.'s No. 2 Cockrell-Moran, Lake Grand Ecaille ..... Moving in material.
Humble Oil & Ref. Co.'s No. 3 Cockrell, Lake Grand Ecaille ..... Cap rock 1,525-44 ft.; pumping water into cavity.
The Texas Company's No. 4 State, Garden Island ..... Drlg. sand 2,727 ft.

ST. LANDRY PARISH

Herbert-Baker Oil Co.'s No. 1 Fisher, Sec. 10-3s-4e ..... Fishing 4,378 ft.

ST. MARTIN PARISH

The Texas Company's No. 1 Iberville Land ..... Rig.
The Texas Company's No. 4 St. Martin, Hager ..... Derrick.

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ST. MARY PARISH

Louisiana Land & Exploration Co.'s No. 1 Fox, Berwick	Temporarily abdoned 6,055 ft.
The Texas Company's No. 1 South Coast, Sec. 41-14s-10e.	Drlg. sand, lime and shale 6,882 ft.

TERREBONNE PARISH

Freeport Sulphur Co.'s No. 1 Nelson, Sec. 12-21s-11e	Abandoned 6,023 ft.
Charles Paggi's No. 2 Evergreen, Sec. 14-15s-16e	Abandoned 1,818 ft.
The Texas Company's No. 4 State, Bay St. Elaine	Abandoned 5,560 ft.
The Texas Company's No. 5 State, Bay St. Elaine	Location.
The Texas Company's No. 3 State, Caillou Island	Abandoned in cap rock 2,984 ft.
The Texas Company's No. 4 State, Caillou Island	Location.
The Texas Company's No. 5 State, Caillou Island	Driving pilling.
The Texas Company's No. 3 State, Dog Lake	Derrick.
The Texas Company's No. 4 La. L. & E. Four Isle	Coring sand 1,397 ft.
The Texas Company's No. 2 La. L. & E., Bay Junop	Rig.
The Texas Company's No. 5 State, Lake Barre	Drlg. hard sand 950 ft.

CANADIAN FIELDS

(Continued from Page 60)

Co.'s No. 5, LSD 7, Section 20-19-2w5, is drilling at 4,899 feet, 419 feet in the lime with wet gas flow increased to around 8,000,000 feet. As this would make only a small producer, it will be drilled deeper. Home's No. 4 at 5,601 feet is rigging up diamond drill to clean out hole and restore production. Home's No. 6 is drilling at 3,722 feet and Home's No. 7 is at 2,216 feet and running 15½-inch casing. Northwest-Associated's No. 2, LSD 6, Section 20-19-2w5, is redrilling at 4,851 feet after getting the lime at 4,956 feet. In Section 17-19-2w5, Mayland Oil Co.'s No. 2, LSD 8, is at 4,851 feet and drilling. Mayland's No. 3 is drilling at 4,934 feet. Southern Lowery's No. 1, LSD 3, Section 9-19-2w5, is at 3,956 feet and drilling. Royalite Oil Co.'s No. 24, LSD 3, Section 29-19-2w5, is drilling at 4,465 feet.

In Central Turner Valley, Royalite Oil Co.'s No. 9 at 5,592 feet is cleaning out after a shot with 700 quarts. It is in LSD 6, Section 13-20-3w5, just north of the Spooner and Vulcan wells; it has a small production in the lime. Royalite's No. 20, LSD 7, Section 12-20-3w5, after taking light crude production at 3,212 feet, is preparing to deepen to the lime.

Central Turner Valley

In Central Turner Valley, Calmont Oils' No. 1, LSD 2, Section 1-20-3w5, 423 feet in the lime at 5,877 feet showed 2,000,000 feet of wet gas. It was shot with 400 quarts and is cleaning out for another test. Okalta Oils' No. 2, LSD 8, is standing cemented at 4,818 feet and will probably not resume drilling until diamond drill outfit is released by completion of No. 3, LSD 9. The latter is drilling in lime at 4,287 feet with around 4,000,000 feet of wet gas. Midfield Oil Co.'s No. 1, LSD 9, is drilling below 3,950 feet. Sioux City Oils' No. 1, LSD 10, is at 5,280 feet and drilling 895 feet in the lime. McLeod Oil Co.'s No. 5, LSD 15, is drilling at 4,457 feet. Structure Oil & Gas' No. 1, LSD 7, Section 31-19-2w5, is at 4,360 feet and drilling. Dome Oils' No. 2, LSD 16, Section 36-19-2w5, is drilling at 200 feet. Spooner Oils' No. 4, LSD 14, Section 13-20-3w5, is at 3,700 feet and drilling.

In Section 12-20-3w5, New McDougall-Segur's No. 3, LSD 14, is drilling out cement after overcoming caving around 5,112 feet. No. 3, same LSD, has resumed drilling after cementing 8½-inch casing at 4,850 feet. British Dominion's No. 3, LSD 6, is drilling at 2,320 feet.

Resumption of work on Illinois-Alberta Oils' No. 2, LSD 14, Section 12-20-3w5, is planned under a reorganization proposed by A. Owen Jennings. It is proposed to organize New Illinois-Alberta Oils, Ltd. to take over the interests of the old company. Mr. Jennings proposes to turn over to the new organization 1,020 acres on the Sinclair, upper and lower Highwood, Watson, Red Coulee, Shepard and Quaich Fields, and to put in $25,000 cash, in exchange for 750,000 shares. This will enable the company to clean out and restore production of No. 1 well, formerly good for 100 bbls. a day, and probably to finish No. 2, which has been standing at 3,684 feet. The proposal will be considered at a shareholders' meeting on August 29.

South Turner Valley

In South Turner Valley, Calmont Oils' No. 7, LSD 11, Section 20-19-2w5, is drilling 300 feet in the lime at 5,262 feet. Calmont's No. 4 is at 4,758 feet and repairing. Conley Oils' No. 1, LSD 4, Section 21-19-3w5, is reported working on derrick. In Section 4-19-2w5, Mercury Oils' No. 1, LSD 13, is reported resuming at 4,585 feet. Mercury's No. 5 is drilling at 4,096 feet. Miracle Oils' No. 1, LSD 11, is at 4,390 feet and drilling. In Section 16-19-2w5, Homestead Oils' No. 1, LSD 5, was shot with 800 quarts at 4,795 feet and is cleaning out. It is estimated production will run 100 to 150 bbls. East Crest Oil Co.'s No. 1, LSD 5-6, is reported fishing for twisted drill rods at 4,452 feet. East Crest's No. 2-A, LSD 4, got the deep lime around 4,243 feet and is preparing to resume at 4,278 feet after cementing casing.

New Gasser in South

On the Rogers-Imperial structure, in southern Alberta, east of Coutts and a short distance north of the international boundary, Range Oil & Gas Co.'s No. 2, LSD 6, Section 21-1-11w4, is unofficially reported to have come into production as a large gasser at 2,650 feet. Range's No. 1, formerly the Rogers-Imperial well, in LSD 9, Section 29-1-11w4, finished at 2,797 feet after getting a big gas flow, estimated 52,000,000 feet a day, from two horizons. No. 2 is installing control head before deepening to the lower gas sand. The test was drilled to secure additional production for export to Montana.

In the Skiff Field, Devenish Petroleums' No. 4, LSD 13, Section 29-5-14w4, is reported drilling at 3,060 feet; the test is below the Sunburst, where some gas was met, and close to the Ellis.

On the Spring Coulee structure, Alberta Pacific Consolidated's No. 1, Section 15-4-23w4, is drilling below the Milk River formation at 2,498 feet with some gas showings.

In the Milk River district, Commonwealth Petroleums' No. 1, LSD 9, Section 9-3-15w4, is at 4,341 feet and casing will be run before deepening into the Devonian lime. Capitol Oil & Gas Co.'s No. 1-A, LSD 16, Section 31-1-12w4, is standing cemented at 3,520 feet.

In the Eyremore district, Hudson's Bay Oil & Gas Co.'s Lomond No. 2, LSD 1, Section 26-17-18w4, is drilling at 4,055 feet. In Keho Lake district, Hudson's Bay Keho No. 1, LSD 2, Section 17-11-22w4, is at 1,470 feet and drilling. Geologists for the Hudson's Bay organization are carrying on survey work near Travers, south of Lomond and north of Lethbridge.

Red Coulee Field

On the Red Coulee international structure, drilling operations are increasingly active on the southern or Montana end while Alberta drilling shows a decided slackening. Monalta Oil Co.'s No. 2 Buckley, Section 1-37-4w, cemented casing at 2,518 feet and will drill into production. Ohio Oil Co.'s No. 2 Farbo has recemented at 2,517 feet, and will be drilled in shortly. It is a quarter mile west of Cosmos' No. 2 producer and a half mile west of the main producing area, so that production will materially extend the field. Ohio Oil Co.'s No. 3 is reported spudding. Hannah Porter Oil Co.'s No. 2 is reported at 1,150 feet and drilling. Alberta Pacific Consolidated's No. 2 Singleton is drilling below 2,200 feet after cementing 10-inch at 2,000 feet. Rice & Radigan's No. 1 producer is reported making 105 bbls. a day; No. 2 is drilling around 2,075 feet. Nellie Jane's Farbo No. 1 is resuming after setting surface pipe at 240 feet. Askalta Oils' No. 1 is reported drilling below 260 feet. Omega Oil & Gas Co.'s No. 1, Section 12-27-4w, has set surface pipe after encountering traces of shallow oil and gas. Adanac Oil & Gas Co.'s No. 1, Section 12-37-4w, is drilling below 2,400 feet.

Inland Petroleums' No. 2, two locations east of No. 1 producer, has spudded in; it is a diagonal offset to Ohio Oil Co.'s No. 1 producer. Inland Pet.'s No.

1 has been shut down pending erection of a lighter derrick to handle tubing and rod installation; original derrick was skidded to No. 2. Power plant is also being erected, designed to pump the entire lease. Gas from No. 1 is being sold to a number of drilling outfits. Operations of this company are being financed largely by Alberta capital, Alex Morrison of Coleman being president and Arthur M. Densmore of Lundbreck managing director.

On the Alberta end of the structure, Taylor Syndicate's No. 1, Section 4-1-16w4, offsetting Vanalta's No. 2 producer, is drilling at 2,585 feet and logging 8 feet higher. Altamont Oil Co.'s No. 1, Section 28-1-16w4, has camp buildings erected and is working on derrick. Celtic Oil Co.'s No. 1, LSD 4, Section 17-1-16w4, is drilling below 1,800 feet with small shows of oil and gas.

Drilling in the Foothills

On the Highwood structure, south of Turner Valley, Hudson's Bay Oil & Gas Co.'s No. 1 Highwood, LSD 8, Section 1-18-3w5, has encountered considerable shows of crude oil in the Madison limestone around 3,000 feet and is deepening for commercial production. Some trouble was experienced above the oil horizon in shutting off salt water intrusion, but this was overcome. At last reports the test was drilling at 3,161 feet. Northwest-C. & E.'s No. 1, LSD 8, Section 35-18-3w5, is drilling at 3,147 feet.

On the Waite Valley structure, Angus Oils' No. 1, LSD 5, Section 3-21-4w5, is at 3,050 feet and drilling. Calgary Development's No. 1, LSD 10, Section 21-19-3w5, is making new hole at 3,059 feet.

On the Watson structure, Source Rock Petroleums' No. 1, LSD 5-6, Section 21-9-2w5, is hauling equipment.

On the Herron structure, Herron Petroleums' No. 1, LSD 3, Section 13-22-6w5, is drilling at 2,175 feet.

Wainright Field

In the Wainright Field, east-central Alberta, Onalta Oils' No. 1 L.S.D. 8, Section 20-45-6w4, has been put in steady production with 8¼-inch casing set on top of the oil sand at 2,230 feet. The well was drilled 7 feet into the sand. A 17-hour pumping test showed 216 bbls. of 22.6 crude, and steady production is estimated at 200 bbls. a day. The crude is probably the lighest yet struck in the Wainright Field, showing 18 per cent gasoline and 16 per cent light refractions. Edalta Oils' No. 1, L.S.D. 15, Section 19-45-6w4, Hargal Oils' B.P. No. 4, L.S.D. 12, Section 30-45-6w4, and Wainright Petroleums' No. 1, L.S.D. 6, Section 30-45-6w4, are all in the sand and will be put on the pump in the near future. Senator Oil & Gas Development Co.'s No. 1, Section 23-44-6w4, is drilling 20-inch hole at 450 feet and planning to carry at least 10-inch to production.

In the Ribstone Field, Imperial Oils' No. 2, L.S.D. 14, Section 9-45-1w4, and Meridian Oils' No. 2, L.S.D. 4, Section 16-45-1w4, are in production. Meridian's No. 3, L.S.D. 4, Section 16-45-1w4, is reported drilling. Oxville Oil & Gas Co.'s No. 1, L.S.D. 15, Section 10-46-2w4, is at 2,297 feet and reaming. London-Ribstone Oils' No. 2, L.S.D. 5, Section 22-43-3w4, is at 2,107 feet and drilling.

On the Duvernay structure, north of Edmonton, Alberta Pacific Consolidated's No. 1, L.S.D. 5, Section 34-55-12w4, is drilling at 2,152 feet.

British Columbia

In British Columbia, Pacific Petrol Products, Ltd. of Victoria is preparing for a test in the Sage Creek district near Dorr. The company was organized in 1929 with offices at Victoria, B. C. Officers are: president, A. J. Daniels; secretary-treasurer, H. W. Baker; directors, A. Anderson, Olivia A. Homer, R. S. Robinson, A. W. Stewart, F. S. Barrett, A. J. Fouracre.

An investigation of oil prospects in the Okanagan district was conducted some time ago by C. E. Cairnes of the Geological Survey of Canada, who reported: "The geological formations consist in part of rocks in which one never looks for reservoirs of petroleum; in part of sedimentary rocks that have been so squeezed and baked that any petroleum they may have contained has been expelled. A brief consideration of the geological environment of the north Okanagan Valley should convince any one of the utter improbability of either petroleum or natural gas being present in any of the rock formations represented."

Leasing Terms Criticized

A. E. McCroskey of Los Angeles, who has been in Alberta in connection with projected development work in the southern foothills area, states that American capital is available in considerable amounts for development in western Canada, conditional on a satisfactory percentage of royalty basis. Development, he states, has been held up by the attitude of leaseholders who are not satisfied with a moderate return from the acreage they control. The extensive development in the American West has been made on a much lower royalty basis than that generally in effect in Alberta.

Ontario Fields

In Ontario, Union Natural Gas Co.'s No. 12 Sykes farm, Lot 15, Concession 15, Raleigh Township, in the D'Clute Field, finished with a hole full of water around 1,750 to 1,800 feet, and is being pulled and plugged. Union's No. 14 William Hornby farm, E half Lot 147, North Talbot Road, is drilling below 800 feet. Farther east, Southern Ontario Gas Co.'s No. 1 Linley, Lot 131 North Talbot Road, has been plugged and abandoned.

In the Dawn Field, Lambton County, Union Natural Gas Co.'s No. 48 Harris farm, Lot 30, Concession 9, Sombra Township, is drilling around 1,200 feet.

In Enniskillen Township, Lambton County, Sarnia Oil & Gas Co. has shot Oil Springs Oil & Gas Co.'s deep well in Lot 19, Concession 2, near Oil Springs, drilled some years ago by Imperial Oil, Ltd. as a test of the Trenton limestone and finished at 3,750 feet. Following the shot the well bridged and is being cleaned out to determine results.

Considerable activity is in prospect for Moore Township, where shallow tests recently drilled indicate possibilities of gas. A syndicate including George T. and Ross Gregory of Petrolia and Hess & Millar of Detroit, has bought 700 acres outright and leased 2,000 acres additional along the St. Clair River north of Corunna. One shallow test got a fair gas production at about 60 feet, measuring around 400,000 feet a day with 5 pounds pressure. A second test encountered a strong flow of mineral water. It is stated that a year's drilling program has been mapped out and a second drilling outfit will be moved in. Nos. 1 and 2 wells have been capped. It is claimed the acreage shows some indications of shallow oil.

In Middlesex County, Southern Ontario Gas Co.'s No. 3 test, in Mosa Township, near Newbury, is drilling around 1,650 feet.

Petrol Oil & Gas Co. is planning to extend its operations on the Six Nations Indian Reserve, near Brantford, where some 23 wells have been drilled, 22 encountering fair quantities of gas at shallow depth. This gas is contracted to the Southern Ontario Gas Co. The company has sublet 7,500 acres to the Ajax Oil & Gas Co., which is also carrying on development on a royalty basis. The Petrol company's two Trenton wells, in Dover Township, Kent County, were recently cleaned out to restore production; the gas is taken by the Union Natural Gas Co.

COOKE COUNTY LINE

WICHITA FALLS, Tex., Aug. 16.—To transport oil from their new wildcat test in the Lawson lease in southeast Cooke County, the Faith and Deep Rock Oil Corp. is laying a new 3-inch line from its lease to Muenster, where it connects with the Shell Petroleum 4-inch carrier. The line when finished will have a length of approximately 9 miles.

J. K. FINLAYSON DEAD

John K. Finlayson, Sr., 84, manufacturer of oil field tools since development of the early Bradford, Pa., pool, died at Spirit Lake, Iowa, last week. Born in Scotland, he came to the United States in 1872. Twenty years ago he came to Tulsa from Sistersville, W. Va., and established an oil field tool plant.

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FOR SALE approx. 950 pieces of 17 ft. length 3 inch "NATIONAL" Matheson Joint Pipe Dipped Only, second hand, but never used. Quote best F.O.B. Hot Springs, Arkansas, price. Address Box E-263, The Oil and Gas Journal, Tulsa, Okla.

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GRADUATE GEOLOGIST and mining engineer with 10 years' varied engineering and geology experience desires permanent position with responsible oil company. Prefer Mid-Continent Field. References. Write Box E-263, The Oil and Gas Journal, Tulsa, Okla.

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Gasoline Alone Active in Chicago Area

Movement Is Chiefly on Contract but Spot Sales Are Something Larger. Reports on Consumption Are Not Wholly Favorable

By J. B. Waldo

CHICAGO, Aug. 18.—The market as a whole was quiet on Monday, the only active product being gasoline. In this the movement continues to be chiefly on contract but the spot sales were something larger than a week ago judging from comparisons made by some of the most active of the sellers. Reports as to the consumption are not entirely favorable, northern resorts reporting that they were having an early end to the season which has been brief and, generally, the distributors are finding that their gallonage is barely up to last year at this time. Prices are just about steady with some hope that there may be some improvement by the close of the month. Major refiners this morning were asking their old price of 6½ cents Group 3 for their U. S. Motor gasoline but getting little of the spot business which was being taken by other sellers at a general price of 5¾ to 6 cents but with many special quotations made at even lower prices to secure business. It is reported that the order of the buyer for the Yellow Cab and other large companies bought last week from a differential refiner at 4.42 cents Group 3 basis. Another bidder who made a price of 4½ cents was informed that his price was too high. Such prices as this show to what extent the refiners in this district will go to retain the advantages which their location has given them. The demand was without any special feature and was almost entirely for the U. S. Motor grade and for the antiknock gasolines.

Other Products

Kerosene continues neglected. There was little actual movement of furnace oils but some contracts were sent in signed and there were inquiries regarding future movements especially of the straw and amber zero gas oils which are hard to buy. The inquiries for industrial fuels were very light this morning some reporting none of any consequence and prices were being forced down by the price competition which results from lack of orders with more or less ample supplies.

Weather conditions continue very favorable for motoring except for showers in some parts of this territory. Next week is expected to develop a more active local demand owing to the National Air Races which are to be held near this city.

Too Many Filling Stations

It seems to be generally assumed that cost of distributing gasoline is more or less equal to all in the same community. There is a common reckoning of the cost as if when it was settled for one concern, it was pretty well settled for all. Yet there is a vast difference in the actual cost of distributing gasoline under different conditions, just as there is a great difference in the cost of performing almost any commercial act. Judging from the reckless way in which the oil companies are increasing their outlets, there has been little thought taken as to the actual cost of distribution. Concerns go into a town and build a station when obviously there is not enough business in that town to keep the stations already there more than half busy and barely profitable. Recently the writer's attention was called to the fact that one of the largest of the integrated companies had secured a site and was about to build a station in a little northwestern city. In 1914 this little city had a population of about 5,000 people and it had one service station owned and operated by the Standard Oil Co. of Indiana. In that year an active independent organization started a station in that little city and for several years the business was pretty well divided between the two companies with the independent having rather the best of it. But gradually first one and then another of the oil companies thought that they must be missing something good. Today there are nine oil companies including Sinclair, Shell, Pure and Phillips and the last to come, but really not started yet, the Cities Service Co. The report of the oil inspections made in that city for the first six months of the current year show that the original independent company is getting a little more than one-third of the gasoline business, the Standard Oil Co. a little less than one-third and the remaining one-third is divided among the other seven companies, one of which had inspected for its station 50,000 gallons in six months and another 38,000 gallons in the same period. There is just about enough business to keep three companies going.

Chicago's Many Stations

But this condition has been a matter of slow growth. It is different in Chicago where things happen quickly. In some of the sparsely settled parts of the city, where there is practically no local trade and the prospects of any transient trade are poor at best, stations are being built across the street from each other and every few city blocks there are other nests of stations. All of them are of the super-station type with full greasing and washing facilities. Some of these stations never will pay. Some of them may pay in time but the thought that is back of it all is that there is no need for them. They may serve as a little convenience to some of the people in that district but to the owner of a car, a block or a half dozen blocks are all one when it comes to getting a fill of gas at his favorite station. Getting back to our little northwestern city, the two first stations could amply supply the needs of the city. They are at present doing two-thirds of the business and could easily do a little more business, each one of them. Just how much the investment in the other stations or just what their running expenses are, many can make an intelligent guess. Whatever the sum may be it is all wasted, every cent of it, both the original investment and the daily expenses of these stations. Some of the oil men believe that a suppression of all the unneeded stations would reduce the cost of distribution by more than one-half. Suppose that it were but one-third and take one-third from the selling expenses of the oil industry. What a tremendous sum it would be.

Eats into Profits

One of the great oil companies in its recent statement showed a small loss as compared with a large profit for the corresponding period of last year. The great expansion in the costs to do business of that company has been in its distribution. There may have been increases in the costs of other departments but the great increase was in the distributing cost. Now it is confronted with the problem of so budgeting its expenses that it will be able to sell as much or more gasoline and other products at half the expense for selling and its own men say that it cannot be done; that any such reduction in the operating expenses will cut into the the gallonage. Too many unprofitable stations is the trouble. And what can be done with an unprofitable station? Obviously the company will not find a buyer at what the sation cost. The necessity is on the management to make that station pay and it is this necessity of making station show a profit that is back of some of the moves that are made in the matters of prices and discounts. The theory on which is based the idea that if a company cannot make any profit selling at a certain figure, the thing to do is to reduce that price, is very frequently followed in practice.

During the past week, the refinery markets showed the result of the working out of this theory, and occasional sales of gasoline by large refiners at low prices became the rule with these refiners. Efforts are being made to get the larger companies to stop cutting prices at the refineries and to hold their tank car prices to at least some semblance of a reasonable figure as regards the cost of refining to say nothing of the cost of distributing. Sales were actually made last week by large refiners to brokers for resale at 5¼ cents, Group 3, for U. S. Motor Gasoline. The price was not general; it was made to a few, maybe to not more than three or four, but unless this tendency to cut prices with or without a seeming reason is checked, that price will be established as the going price for resale in this market. There is no resistance to higher prices. The trade as a whole had much rather see the refinery markets advanced than the tank wagon price cut, but obviously the two cannot continue indefinitely at such a wide spread. Aside from this one feature the market here seemed to be a little stronger. The heavy reductions in the gasoline stocks the country over have not been without some influence. The large national consumption is another factor which is adding to the strength of the situation, the continued reduction in crude output and in crude runs to the stills all suggest that there is a bottom price and that some small advance at least was due to the refiners of gasoline.

Gasoline Quotations

There is little difference in quotations on gasoline between the differential territory east of the Mississippi and the nondifferential territory west of that river. Reports received for numerous points in Iowa and from Omaha indicate that the usual quotation for U. S. Motor Gasoline both east and west of the river last week was 5¾ cents, Group 3 basis. There are some dumping grounds such as Detroit and Chicago where lower prices were made. A large jobber at Detroit stated that his price for gasoline was .0480 cents, Group 3, which with the freight added would make the delivered price for this U. S. Motor Gasoline .0850 cents, Detroit, and this price was quoted by at least two East Chicago plants for Michigan and Ohio. In Illinois and Indiana differential territory the price had been held at 5¾ cents, but there were some exceptions. Some very low prices were also quoted in the Michigan-Ohio territory for 60-62 400 endpoint, but with the stronger and much higher market for natural gasoline this price is not likely to be repeated. The demand for the higher tests continues to be light. One of the local concerns had an order for one car of 68-70 350 endpoint and had difficulty in locating the material and in fixing the price.

The demand for natural gasoline has experienced a sudden change. A couple of weeks ago one of the plants with an agency in this city had its tanks full and not an order was to be had with the price around 4 cents. It finally made a clean sweep of its stocks for export at a low price. Today it is behind on its orders and every one of its regular customers is buying and paying now 5½ cents. It is freely predicted that something the same might be done with regular gasoline if the refiners could only agree on some policy to be followed and stick to it, for there is no real resistance to a fair market for gasoline except the large refiners themselves and in at least one case the trouble seems to be that that organization is under the necessity of turning its inventories into cash so it sells and sells and takes what it can get in the way of a price.

Consumption Is Off

The consumption of gasoline in this territory over July fell short of last year with some of the large companies. There were many small concerns with stations in Illinois only which had a large business in July, 1929, as that was the month that preceded the new gasoline tax, and the last week every consumer filled up his gasoline tank at the old price and many, especially the commercial accounts, some of whom have a little storage, filled it during that last week. The concerns which showed an increase for July are those which have added so largely to their outlets that they were able to overcome the lack of country demand.

The cause for the lack of gallonage is attributed to the small buying done by the country motorists who have not been using their cars as freely as in past seasons, largely on account of general business conditions. There is some of this evident in the city. Suburban stations in some sections also make the same complaint of small fills and few who buy to the limit of their capacity.

Cut-price stations have played some part with some companies who have had to meet with extreme competition. In some instances that have come under the writer's observation, the cut-price station has just about put a neighboring station of one of the large distributors out of business. This particular distributor does not handle Ethyl Gasoline. If it did there might have been a different story for the demand for Ethyl Gasoline is more than holding its own in this territory. The only trouble is that Ethyl Gasoline is now produced by so many different refiners that the competition for jobbers to handle the Ethyl product is as keen as in the other products.

Kerosene Moves Slowly

Kerosene continues to move very slowly and the prices are barely steady at 3 cents, Group 3, to the jobbers. Some are asking a little more but the market is really 3 cents for good 41-43 water white kerosene. The tractors will be used a little more after the close of this month but jobbers with a tractor trade say that the farmers prefer to use gasoline at the present parity of costs between that and kerosene and some are using a prime white distillate either with or without a mixture of a small percentage of gasoline. There seems to be nothing before the product in the immediate future.

Furnace Oils

The spot demand for domestic furnace oils is light, just a few scattered cars as a rule with an occasional larger order for storage if the price is low enough to tempt some of the larger distributors. There has been little change in prices for immediate movement. With kerosene at 3 cents, distillate will hardly sell at more than 2¾ cents and gas oil is also held down by the price of the other products which sell regularly at higher prices than gas oil. The zero oil has sold here in some instances in quantities as low as 2¼ cents and 2½ cents is regular for the darker oil and 2¾ cents for straw gas oil which is rather hard to buy and commands some premium. Prime white distillate is also rather strong as compared with the usual grades. There is the beginning of the contract movement

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East Coast Market Slightly Improved

Record Gasoline Sales but Financial Returns Are Below Expectations. Gasoline Export Trade Slackens

By A. E. Mockler

New York Bureau, The Oil and Gas Journal, Rooms 1919-21, No. 154 Nassau Street

NEW YORK, Aug. 18.—A slight improvement in the East Coast gasoline situation developed during the past week, but with this exception the market remained in rather dull position. On the bear side of the market, further easiness developed in cylinder oil prices, particularly on offerings for export, and prices were lower on several grades.

Refinery curtailment is being reflected in a slow but steady improvement in the statistical position of motor fuel. Refinery holdings during the week ended August 9 showed a reduction of 1,371,000 bbls., with stocks on hand the smallest since the start of the year. Current indications are that refiners will continue to draw from storage for the balance of the summer and fall motoring season, but the industry is of the opinion that further curtailment of refinery runs will be necessary over the winter months if continued progress toward the elimination of unnecessary and uneconomic stocks is to be achieved.

Gasoline Sales Very Large

While gasoline sales in the East continue to run at record levels, financial returns to refiners and marketers are not all that had been expected, current competition cutting seriously into earnings in a number of instances. Price cutting is more rife at this time than at any time within the past year, and sales revenues naturally reflect this situation. With the refinery market still in easy position, and stocks of motor fuel liberal, notwithstanding the cuts in refinery holdings, the outlook for the remainder of the season is still somewhat clouded from a price standpoint.

Operations in the gasoline export trade have been virtually at a standstill during the past week, in so far as the open market is concerned, rumors of a pending price reduction in posted schedules at the Gulf having been instrumental in influencing many buyers to withhold their inquiries pending further developments. It now appears probable, however, that the reductions, if finally made, will not develop for another month, at least, and a number of cargoes are expected to be placed during the coming week.

Refinery Gasoline

While the posted quotation for U. S. Motor is still nominally held at 9 cents per gallon in tank car lots f.o.b. refinery, this quotation remains susceptible to shading. The average going price in the present market appears to be about 8½ cents per gallon, although 8 and 8¼ cents are being taken in some instances. Jobbers are still keeping their storage full, but volume has eased off somewhat during the week under review. The protracted hot spell which ruled during the second half of July and the first 10 days of August has given way to the opposite extreme, and unseasonable cool has replaced the heat of a month ago, with a resultant falling off in motoring and gasoline consumption.

The barge market is the hot spot of competition in the gasoline market at the present time. With many jobbers throughout New York and New England territory possessing bulk plants which may be reached by either tank cars or canal or deep water barge tankers, there has been a marked veering toward the latter method of delivery. Business in U. S. Motor is reported to have been done at refinery terminals in the New York harbor area this week at 7¾ cents per gallon in barge lots, running between 5,000 and 10,000 bbls. capacity each.

In addition to the open market sales of gasoline in barge lots, most of the large companies marketing in this area have developed extensive waterfront distributing plants. The barge and shallow-draft tanker movement out of Bayonne and Bayway these days is the most extensive in the history of the industry locally.

With water movement supplanting rail movement to a considerable extent, and Standard of New Jersey running large quantities of its gasoline production at Bayonne to distributing points through the Tuscarora pipe line, rail movement of tank cars in the Bayonne area has shown a material falling off.

Tank Wagon Gasoline

While "official" tank wagon and service station prices in local territory have not been changed during the week aside from a 2-cent advance in the retail price at Richmond, Va., it is still anybody's market, in so far as prices are concerned. The most common price at retail stations in the New York City area appears to be 6 gallons for $1, including tax, which figures out 14⅔ cents per gallon net at the station. The posted price for leading brands at the filling station is 18.3 cents per gallon.

Premium fuels, hitherto pretty well exempt from price cutting practices, are now being involved in the competitive situation to an increasing extent.

Standard Oil Co. of New Jersey is starting to put tires and tubes in stock at its filling stations in the eastern area, and this development is being watched with considerable interest. Colonial-Beacon Oil Co., a subsidiary of the New Jersey company, is already marketing these products at its stations in New York and New England, and current reports have it that all of the major marketing companies operating here, with the probable exception of Standard Oil Co. of New York, will shortly follow the lead of the New Jersey company and its subsidiaries.

While gallonage in the East is running materially ahead of last year's totals, there has been a perceptible falling off in volume during the past week, due to unfavorable weather conditions.

Reports of marketing companies indicate that marine sales of gasoline this year will establish a new high record, the vogue for motor boating having substantially widened this year in eastern waters.

Kerosene

Unfavorable conditions again prevailed in the kerosene markets throughout the eastern area this week, with the undertone still easy. Refiners locally are quoting 41-43 water white at 6¾ cents a gallon but the market is by no means stable at that level, and price cutting is of frequent occurrence.

Pennsylvania refiners are an important factor in many sections of the market, and competition from this source is being strongly felt in many markets where the Pennsylvania product does not normally enter. Kerosene stocks at eastern refineries are still topheavy, and little improvement in the market situation is looked for until more of this surplus is liquidated.

In the retail end of the market, there has been little change. The posted prices for tank wagon deliveries are unaltered, with but moderate sales reported.

Lubs

The market for cylinder oils has failed to hold the gains made in recent weeks, and selling pressure is again in evidence, particularly on export sales. For prompt shipment, 600 steam refined is offering at 17½ cents per gallon, 635 steam refined at 19½ cents, and 650 steam refined at 23½ cents per gallon, reductions of 1 cent per gallon in each instance. On 600 and 630 Pennsylvania Flash the market is nominally unchanged at 28 cents and 31 cents, respectively. Warren 600 E is down 1 cent at 25 cents per gallon, with Oil City E showing a corresponding drop to 24 cents. Bright stocks have likewise sagged a little, with light 140-150 at 32 to 33 cents per gallon and dark at 30 to 31 cents, down 1 cent in each instance. All of the foregoing quotations are for oil in barrels, at Bayonne. There has been but a limited export inquiry during the week, much of the new business which operators had anticipated failing to develop. Domestic movement was also along routine lines.

Domestic consumption of pale and red oils has picked up a little during the past week, and refiners are looking for further gains in the tank car movement. Quotations remain unaltered on all grades.

Wax

A revival in export inquiry has brought about a better feeling in the export market, and the undertone is stronger. A number of inquiries for forward delivery wax have come into the market during the week and refiners are reported figuring on some of this business. For prompt shipment, quotations are one-eighth cent per pound higher on 125-127 a.m.p. and 130-132 a.m.p. at 3⅜ cents per pound and 3⅝ cents per pound, respectively. Other melting points remain unchanged. England and South America are prominently mentioned as inquiring for later shipments at the present time, and other foreign buyers are expected to re-enter the market shortly.

Domestic consumption is reported picking up a little, but buyers in home markets apparently are not yet convinced that the turn in the market has come, and there is little interest shown in offerings for delivery over the closing quarter of the year.

Fuel Oil

While the market is in rather easy position, from the statistical standpoint, leading refiners continue to hold bunker "C" at $1.15 a barrel, f.o.b. refinery terminals. Fuel oil can be laid down at New York from the Gulf considerably under this level, but there is little movement of this sort, and receipts of California fuel oil are also light.

Volume of sales in the spot market is reported a little better this week and withdrawals against resting contracts in the marine end of the business are also at satisfactory levels.

Diesel Oil

Spot sales of Diesel oil to the marine trade are heavier than at this time last year, and contract deliveries to vessel operators are also running ahead of 1929 totals.

Refiners continue to quote Diesel oil at $2 per barrel on contract deliveries, with some spot sales reported going through at 5 to 10 cents per barrel over this level, all quotations being in bulk at refinery terminals with the usual charge for delivery alongside within the harbor limits.

Gas Oil

Little interest is shown in this branch of the market, spot sales being light and contract movement also around its lowest ebb for the year.

Refiners quote 28 plus recycled oil at 5¼ cents per gallon, with shading still prevalent on spot transactions and the market range at 4¾ cents to 5¼ cents.

Gulf Export Market

Uncertainty regarding the possibility of a cut in export gasoline has held back the market, but buyers are apparently convinced that the rumors of a pending reduction were not justified, and are expected to re-enter the market shortly. Three or four cargoes for shipment to France are believed in the offing, and operators expect inquiries for this business this week. There were no cargo sales reported during the week under review.

With crude curtailment put into effect in Rumania, it is reported that a large Rumanian company is in the market for 60,000 tons of gasoline for shipment from the Gulf during 1931 to take care of some of its European committments.

Reports that Standard of New Jersey was dealing with the Spanish Government in an effort to take over operation of the Spanish Petroleum Monopoly aroused considerable interest in export circles this week, but officials of the New Jersey company officially denied the reports.

Mexican and Venezuelan crudes were quiet and without change this week.

California Oil Receipts

Receipts of California crude and refined petroleum at Atlantic and Gulf Coast ports for the week ended August 9 totaled 778,000 bbls., a daily average of 111,143 bbls., compared with 786,000 bbls., a daily average of 112,286 bbls. for the previous week and a daily average of 110,571 bbls. for the four weeks ended August 9. Details follow:

(Barrels of 42 Gallons)

At Atlantic Coast Ports—	
Boston	81,000
New York	483,000
Philadelphia	163,000
Others	51,000
Total	778,000
Daily average	111,143
At Gulf Coast Ports—	
All ports	None
At Atlantic and Gulf Coast Ports—	
Total	778,000
Daily average	111,143
Daily average four weeks	110,571

Distribution of total California receipts is as follows:

Gasoline	433,000
Gas oil	265,000
Fuel oil	80,000

Shipments of California refined products for the East Coast during the week (with identity of owner of tanker moving the oil where such owner of record is an oil company) follow:

To New York—128,500 bbls. of gasoline on the Tamiahua (Richfield).

To Philadelphia—111,000 bbls. of gasoline on the Western Sun and 77,000 bbls. on the Atlantic Sun (both Sun Oil Co.).

To Providence—97,200 bbls. of gasoline on the Yankee Arrow (Standard Transportation Co.-S.O.N.Y.).

To Baltimore—77,000 bbls. of gasoline on the Pat Doheny (Richfield).

Petroleum Exports

There was a better gallonage of refined products moving into export channels this week, and inquiries coming in this week indicate that the export volume will show continued improvement during the next several weeks.

The following table shows principal exports of refined petroleum products from New York for the past three weeks (all figures in gallons unless otherwise noted):

	Week Ended		
	Aug. 9	Aug. 2	July 26
Gasoline	725,000	115,000	130,000
Naphtha	90,000	.....	.....
Kerosene	50,000	230,000	42,000
Fuel oil	145,000	110,000	10,000
Lubricating oil	1,867,000	2,920,000	1,345,000
Petroleum, refined	2,693,000	875,000	200,000
	Pounds		
Petrolatum	.....	8,000	7,000
Paraffin wax	1,275,000	840,000	1,200,000
Refined	225,000	.....	200,000
Scale	285,000	1,225,000	100,000
Lubricating grease	965,000	875,000	675,000

While the outlook for export business during the closing half of the year is believed more favorable than was the

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Of Interest to Sales Departments

Time, Tolerance and Patience Are Needed For Code of Ethics

NEW YORK, Aug. 16.—Pointing out that nearly five years passed before the United States Constitution and the original 10 amendments generally were accepted, W. R. Boyd, Jr., executive vice-president of the American Petroleum Institute, has asked the petroleum industry, in a published statement entitled "The Marketing Code." to be patient with the National Code of Practices for Marketing Refined Petroleum Products, which was only one year old on July 25. The statement appears in booklet form and has been mailed to the 16,000 signers of the code and to members of the institute and code committeemen.

"One year's experience with, and observation of the working of the code has demonstrated to me that it has not 'broken down,' as one occasionally hears someone say," Mr. Boyd writes. "Not only has it not 'broken down,' but it cannot 'break down' so long as 15,800 marketing units continue pledged to abide by and observe its rules, and so long as business integrity and good sportsmanship exist as the cardinal rule of American business men.

"Let us bear in mind that no law, or code, or rule of God or man ever had, or ever will have, 100 per cent observance. Let us remember that the code is only one year old, and that it takes time for so highly a competitive and widespread an industry as ours—where so large a volume of business is handled and so many competitive factors are involved—to readjust its procedure. By the trial and error process we can hope some day to rewrite this code, and make it fit more nearly changing conditions in the petroleum industry."

Mr. Boyd stressed the fact that the code does not fix prices at which refined petroleum products are to be offered for sale, the only mention of prices in the code being contained in an antidiscrimination provision that the selling price be posted for all to see after it has been independently determined by the seller himself.

He explained that the fundamental purpose of the code is to fix certain "rules of the game" which signers agree to follow, with both acceptance and observance voluntary. Seven rules are regarded by the Federal Trade Commission, which approved the code July 25, 1929, as statements of law and any violating them consequently is subject to prosecution whether or not he has signed the code. Fourteen other rules have been agreed upon by the petroleum industry and approved by the commission as sound and ethical business methods.

Nor should the code be blamed for faults it never was intended to correct, Mr. Boyd added. Mentioning specifically price cutting and price wars, he said that overproduction of gasoline, which inevitably leads to crashing price structures and desperate methods to dispose of the excess gallonage, and not the code, should be the point of attack for price wars. Again, he suggested that the code should not be allowed to become an alibi for the shortcomings of nonproductive salesmen, nor should complaint be made that it is weak when the fault is in marketing operatings entirely outside its province.

Minutes of state code committee meetings reveal, he said, that there are relatively few deliberate violations by anyone in authority and that in almost every instance these immediately have been corrected.

TIDE WATER OIL CO. LAUNCHES NEW TANKER

The Tide Water Oil Co. launched its new tanker "Tide Water," in the past week and it will be placed in service to carry Pennsylvania lubricants made at its East Coast refinery to west coast markets.

This tanker, which is completely Diesel operated, has a dead weight tonnage of 13,500 and capacity in the main cargo tanks of 3,954,140 gallons.

This will be one of the largest tankers ever launched for carrying refined products. It is now undergoing speed tests in the Delaware River, having been built in the shipyards of the Sun Shipbuilding Co. at Chester, Pa.

The tanker will be placed in the trade between Tide Water's Bayonne refinery and Pacific coast points. It will be a means of economically distributing Tide Water lubricating oils, and it is anticipated that one of its first cargoes will be composed to a great extent of the Penn-Veedol, the new Pennsylvania lubricant recently announced in Bradford by Noel Robinson.

A great portion of the machinery of the tanker was built in the Oil City works of the National Transit Co. The cargo pumps have a capacity of 3,000 bbls. per hour, and are manifolded to the many compartments, making possible the carrying of a variety of products. A sister ship, "Tide Water-Associated," is under process of construction at the same shipyard and should be ready for launching within a month.

SINCLAIR BUYS PIEDMONT

By the terms of a deal made in this city, final details of which are in process of completion, the Sinclair Refining Co. of New York takes over the properties and plants of the Piedmont Oil Co. of Gastonia, the purchasers acquiring all real estate, leases, contracts, stock and other assets of the local corporation.

The Piedmont Oil Co. was organized in October, 1916, with a directorate composed of a number of outstanding mill executives of that time, among them the late Col. C. B. Armstrong, the late Wiley T. Rankin and the late Andrew E. Moore. There were originally 50 stockholders. For the past five years this company has handled Sinclair products exclusively.

DEEP ROCK ENTERS PLANE

The Deep Rock Oil Corp. has entered the company's plane in the Pacific Derby for class "B" airplanes leaving Brownsville, Tex., August 19 and arriving in Chicago, Ill., August 23, 1930, making the following towns en route: Corpus Christi, Houston, San Antonio, Waco, Fort Worth, Wichita Falls, Oklahoma City, Tulsa, Springfield, East St. Louis, Aurora and Chicago.

STANDARD SALES AHEAD

Sales of gasoline for the first seven months by Standard Oil Co. of Indiana are ahead of sales during the 1929 period, according to Allen Jackson, vice president. Company has a pay roll of 28,600 persons, an increase of 1,400 compared with a year ago. "Considering that a year ago we were at the height of prosperity for all time," Mr. Jackson said, "sales are very good."

NAVY ASKS FOR GASOLINE BIDS

NEW YORK, Aug. 16.—East Coast oil companies are figuring on Navy Department bids for supplying 3,719,000 gallons of U. S. Motor gasoline and 1,931,000 gallons of domestic aviation gasoline to naval stations on the East Coast. The Navy Department will open bids for this gasoline on September 12.

Benzol Is Used in Germany as Chief Antiknock Agent

Benzol is the only antiknock agent used to any extent in German motor fuels, according to Dr. Gustav Egloff of the Universal Oil Products Co., who is now traveling in Europe.

The use of iron carbonyl, which was developed by German chemists, and which seemed to give great promise as an antiknock agent, has been discontinued.

About 40 per cent benzol is the usual proportion used in premium motor fuels, which sell on the average of about 40 cents a gallon as compared with around 37 cents for the regular grades.

Color is rapidly coming into prominence as a feature in the marketing of motor fuel in Germany. Esso, sold there, is red. Aral, a word made of the first syllables of "aromatics" and aliphatics," is blue. Olex, another branded product, is green, and a large amount of the gasoline sold is light yellow.

It seems likely that the refiners are using color in order to break down any prejudice that may exist in favor of water white gasoline and thus get away from needless treating costs.

FUEL OIL STORAGE

CHICAGO, Aug. 16.—The Hughes Oil Co. has leased storage on the water front at East Chicago and plans to receive shipments of fuel oil not only from its associated refinery, the Oil Dutch Refining Co., of Muskegon, but other refiners, especially in the East, who are looking for an outlet for their fuel oil. The demand on some of these eastern plants has shown a considerable decrease and they are considering any suggestion which will enable them to market their fuel oil, some say, at any price. The Lakes seem destined to move a much larger volume of fuel oil as well as of other products in the future. The Muskegon refinery mentioned has shipped fuel oil to Detroit and Cleveland this month. Later in the year, the freezing of the Straits of Mackinaw make shipments from any Lake Michigan port to an eastern port impossible, but some seasons the movement of freight between ports on Lake Michigan is hardly interfered with. It is understood that other companies have had the same idea and that one company has before it a plan to build tankage at East Chicago and Milwaukee and to bring in fuel oil from some of the refineries located on the Great Lakes even as far east as Buffalo, N. Y.

McGONIGLE WITH COSDEN OIL

CHICAGO, Aug. 16.—E. J. McGonigle is now with the Cosden Oil Corp., and is traveling in the interests of Cosden Liquid Gas. "Mack," as he is widely known, has had much sales experience. He was with the Sinclair Refining Co., and later with the Mid-Continent Petroleum Corp. From there he went to the Deep Rock Oil Corp., and has since represented the Burford Oil Co. in this territory.

ASPHALT NEEDED IN VIRGINIA

Between April 1 and September 1 of this year The Texas Company will supply approximately 4,000,000 gallons of asphalt products which will be applied to the state highways of Virginia. During the months of April and May alone more than 150 railroad tank cars containing these materials were shipped to many points in this State from The Texas Company's Norfolk refinery, which will also furnish the balance of the contract.

Study Lubricating Fractions of Crude In Cabin Creek Field

A study of the lubricant fractions of Cabin Creek, W. Va., petroleum has been conducted by the Bureau of Mines. This crude is very similar to most of the Appalachian petroleums, differing from them mainly in that it contains more gasoline and less lubricating stock. The Cabin Creek lubricating stock, moreover, is lighter for a given viscosity than the lubricants from any of the eastern crudes. The study was undertaken with the idea of furnishing data of value in the study of crude oils not commonly used for the manufacture of lubricants. The utilization of such crudes as sources of lubricants may become more and more important should the supply of high-grade oil decrease, the bureau points out.

In Technical Paper 477, by H. M. Smith, just published, methods have been presented for the preparation on a laboratory scale of lubricating stock from a paraffin-base crude and subsequent fractionation. These methods involve (1) topping by natural gas, (2) dewaxing by cold settling from an acetone-secondary butyl-alcohol mixture, (3) segregation of the lubricating stock by steam distillation, (4) fractionation of the lubricating stock by acetone, and (5) further fractionation of these solvent cuts by both acetone and vacuum distillation.

The cuts and fractions thus obtained were studied by determining their characteristic properties, including viscosity, specific gravity, refractive index, molecular weights, and ultimate analysis. Certain other routine tests, such as those for carbon residue and steam emulsion, were also made. A study of the data thus obtained shows that the Cabin Creek lubricants may be roughly divided into two distinct types of mixtures by the selective fractionation with acetone. The more soluble portions of the oil are characterized by relatively high specific gravity and carbon-hydrogen ratio, low molecular weights, and low or medium viscosity, while less soluble portions are typified by the converse of these properties. The data further indicate that, for a paraffin-base lubricating oil at least, the specific gravity, index of refraction, percentage of sulphur and carbon residue, and relative unsaturation are largely functions of the composition that viscosity is a function of both molecular complexity and composition, and that boiling points, flashpoints, and associated properties are largely functions of the molecular constitution.

Fractionation by solvents is of great value in separating the crude lubricating oils into component groups without decomposition but as used in this work does not offer appreciable advantage over high vacuum distillation for the subsequent fractionation of these groups.

It is very doubtful whether individual hydrocarbons have ever been separated from oils in the lubricating range. Consistency in the values of certain properties, such as specific gravity, should assuredly not be construed as indicating that individual compounds have been separated. Study of the fractions made during this investigation does not disclose more than a suggestion as to the identity of the compounds of which these oils are composed.

Copies of Paper 477, "A study of the Lubricant Fractions of Cabin Creek (W. Va.) Petroleum," may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at a price of 15 cents. The paper also contains a chapter on the action of solvents on the heavy constituents of petroleum.

Manufacture of Natural Gasoline

Low Prices Alone Not Sufficient to Cause Legal Action

LINCOLN, Nebr., Aug. 18.—The Nebraska anti-discrimination statute may not be invoked to prevent discrimination in the selling price of gasoline in various communities of the State unless low prices are established intentionally for the purpose of destroying a competitor's business, the Attorney General, C. A. Sorensen, has just informed Howard P. Greeley, of Lincoln.

Mr. Greeley had inquired whether or not something could be done to prevent varying gasoline prices in the State. Mr. Sorensen replied that his office does not have sufficient evidence upon which to base a successful prosecution. His letter follows:

"Your letter of August 4 at hand in which you ask if something cannot be done 'to prevent the discrimination in the selling price of gasoline as it is found in the various cities of this State?'

"You correctly state the law with reference to any company selling a commodity cheaper in one community than in another community, but there has to be taken into consideration in connection with this law the interpretation of anti-discrimination statutes generally by the United States Supreme Court in the Fairmount Creamery Co. case that went up from Minnesota. The Supreme Court in that case held that regardless of any anti-discrimination or other law a seller or buyer of commodities always had the right to meet competition in the locality in which he is doing business. Furthermore, the statute you quote specifically says that in order for the practice of selling goods lower in one community than in another community to be illegal, it must be done 'intentionally' for the purpose of destroying the business of a competitor.

"Keeping in mind this statute and the ruling of the United States Supreme Court, our office has already made a thorough investigation of the subject but so far we have not found sufficient evidence which in our opinion would make possible a successful prosecution. Under the law as interpreted by the Supreme Court, if one oil company in Lincoln sells gasoline for 8 cents per gallon, then all the other companies operating in Lincoln have a right to meet that competition by also selling gasoline at 8 cents per gallon, regardless of what they are selling gasoline in other cities and towns."

CALIFORNIA GASOLINE ASS'N

LOS ANGELES, Aug. 16.—The regular monthly meeting of the California Natural Gasoline Association was held in the patio of the Pacific Coast Club, in Long Beach, at 7 p.m., August 14. "Importance of Internal Cooling in Absorbers and Pre-cooling of Wet Gas" was read by W. L. Rifenberick of the Foster Wheeler Corp., who also described the Los Nietos gasoline plant, illustrating the talk with slides and movies. George Thompson, superintendent of the Los Nietos plant, assisted Mr. Rifenberick.

NEW DEL REY PLANT

The Del Rey Oil & Refining Co.'s new absorption plant on the Union Oil Co.'s lease in the southwesterly portion of the Venice oil field, California, is expected to be in operation within 10 days. The plant will be capable of handling from 10,000,000 to 15,000,000 feet of gas a day, and may be equipped to handle considerably more if the field justifies.

Construction and Operation

SAFETY

The natural gasoline phase of the oil business is inherently the most hazardous. If there is an exception to this statement it may be sustained as to high pressure cracking facilities in the refining industry. The accident record in the natural gasoline industry is, nevertheless, one of which this industry may well be proud.

The writer places a great deal of credit for this record upon an accident which occurred in the early days of the then infant industry—the Ardmore explosion in 1915. This was the first, and it has remained the worst mishap since the inception of natural gasoline manufacturing. The enormous cost in life and property, resulting from the explosion of that tank car of gasoline, was not in vain. The lesson taught was not forgotten. The hazard inherent in gasoline vapors was accentuated in the minds of all in the industry—and of those since entering it. The effective rules and regulations governing the handling of inflammable liquids really date from that time. That accident gave the breath of a continuing life to the Bureau of Explosives, which has been the "watch-dog" supervising the transportation of gasoline and other inflammable liquids and regulating the character of equipment in which these materials might be moved on public transportation systems.

Another rule instituted for the protection of natural gasoline shipments is that one prohibiting the loading or unloading of this material on sidings located less than 100 feet from a main line track. Even with this protection there have been a number of cases where vapors have been ignited from the sparks of passing engines. Fortunately, none of these fires have been serious. An indirect result of this prohibition has been the development of tank car equipment which makes possible "tight" loading and unloading without the loss of vapors, or, at the pleasure of the manufacturer, the excess vapors may be piped back any desired distance from the loading rack. At the unloading point, the vapors may be drawn into the vapor recovery plant. This is a practice widely indulged for safety purposes by those refineries located in cramped quarters where formerly cars were opened with vapors escaping in the shadow of fired stills.

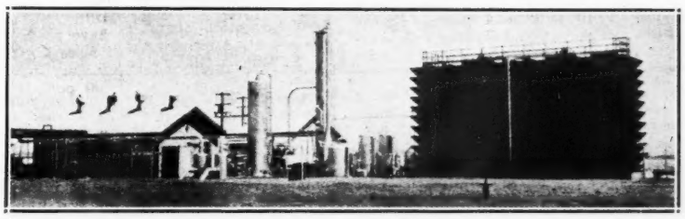
Some years ago the gasoline company executives and their insurance and safety specialists met with State labor officials to draw up safety codes for gasoline plants. A good many valuable safeguards were incorporated in State regulations, which have served as guides for design and construction engineers. The code provides for electrical installations, relief valves, guards, etc., and the least that can be said is that numerous accidents have been averted by conformance to the code. The danger lying in codes of this character is that they become burdensome.

Additional protection against accidents is given by the underwriters. The concern which writes insurance on a plant is willing, and, when asked, does go over plans and specifications and thereupon makes suggestions. The storage may be too close to the power room, or the boiler house may be too near to the compressor room, or it may be that the electrical set-up is not safe. After the plant is in operation, the company inspects the property and then demands that objectionable installations be changed. The cost comes higher than when construction plans are submitted to the insurer. If the changes are not made, the rate is apt to go up.

Every company has operating rules designed to safeguard the life and limb of its men and to protect its property. The work of safety engineers as liaison officers between the office and field has done much to improve the frequency of accidents. An interested management tends to keep the record at its best.

*Twenty-fourth of a series of articles explaining the inner working of a natural gasoline organization. The series was prepared by an operator actively engaged in all phases of construction and operation.

NEW PLANT IN KETTLEMAN HILLS, CALIF.



Latest plant of the Standard Gasoline Co. (Standard Oil Co. of California) which recovers vapors from the storage tanks of the producing department. Compressors are operated by steam.

Who's Who
IN NATURAL GASOLINE MANUFACTURE

AMERADA PETROLEUM CORP.

The growth of the Amerada Petroleum Corp. in the manufacture of natural gasoline has kept pace with its expansion in crude oil production. The corporation in recent years has generally built one or more gasoline plants in the fields where it has become active in the production of crude oil.

The corporation at present has nine plants in operation all of which are located in Oklahoma with the exception of one in Texas. The latest plant built was located in the Oklahoma City Field where the corporation has considerable production. This plant at present has a production of 15,000 gallons daily despite the curtailment program in effect in that field.

The plants are operated from the general offices located in Tulsa. M. E. Mockley has been in charge of this department for several years.

The corporation does not operate refineries so the natural gasoline is sold to other companies. At present the output of all plants is contracted to the Warren Petroleum Co., marketers of natural gasoline.

AMERADA PETROLEUM CORP.

Location—	Daily capacity gallons
Sec. 20-5s-1e, Carter Co.	1,500
Sec. 31-2s-2w, Carter Co.	7,000
Sec. 13-12n-11e, Okfuskee Co.	2,500
Sec. 16-9-5, Pottawatomie Co.	15,000
Sec. 15-8-6, Seminole Co.	3,000
Sec. 7-8-5, Pottawatomie Co.	20,000
Sec. 17-9-5, Seminole Co.	10,000
Sec. 30-11-2, Oklahoma Co.	20,000
Chas. Betts Sur. No. 625, Brown City, Tex.	10,000

VAN GASOLINE PLANT

VAN, Tex., Aug. 18.—The main construction work going on in the Van Field at the present time is the erection of the Pure Oil Co.'s gasoline plant which will be put in operation about the first of September. Fourteen Bessemer compressors have been placed on their concrete bases, and the majority of the ground work has been completed; the rest of the construction will go ahead rapidly. A 24-inch main gas line is being laid in the field, with 14-inch laterals for gathering purposes, and all of the gas from the wells will be handled by these lines.

Pure Oil Co.'s No. 1 J. R. Shivers, in the John Walling Survey, is the heaviest gasser yet encountered in the field. An estimate of the gas capacity of the well could not be obtained, but drilling was halted immediately upon encountering the sand, and casing was set.

PHILLIPS PLANS EXPANSION

CHICAGO, Aug. 16.—Although P. J. Mullins, the new manager of the Chicago office of the Phillips Petroleum Co., was out of the city all of last week in the Southwest, a representative of the Phillips company was at the temporary offices established in the Soverign Hotel. It is clearly intimated that the company expects to have station representation in this city and the surrounding territory. It owns and operates a number of large organizations at Quincy and elsewhere in the southern part of the State, but with the gasoline pipe line to St. Louis, it will be in position, the management believes, to compete for the business of the jobber in any part of the north central territory.

AVIATION GASOLINE TAX FREE

Judge John S. Cotteral of the United States Circuit Court at Guthrie, Okla., handed down a decision concurred in by United States District Judges Ed S. Vaught of Oklahoma City, and R. L. Williams of Muskogee, granting application of air line operators for permanent injunction against the State of Oklahoma from collecting tax on gasoline used in airplanes engaged in interstate commerce. This applies to all transport lines operating in this state and is retroactive in cases of those lines that have been paying this tax for the past two or three months under protest. The State will not appeal.

Brief Items for Petroleum Refiners

Oil Code Rules Out Prizes as Harmful to Aviation Development

NEW YORK, Aug. 18.—Signers of the petroleum industry's code of marketing practices, numbering 16,000 refiners, distributors and retailers, are prohibited from donating products or prizes in any form to unaffiliated aviators or airport operators. This ruling has just been made by the American Petroleum Institute's National Committee on Interpretation of the Code of Practices for Marketing Refined Petroleum Products, and has the backing of the National Aeronautical Chamber of Commerce, which has already expressed itself against the practices indicated as detrimental to the sound development of aviation. The interpretation follows:

Interpretation to Rule 8

In case of airports, air meets, and other flying projects, this code prohibits refiners, distributors, jobbers, wholesalers and retailers from:

1. Donating petroleum products of any nature to aviators or operators or to air races or air meets (Rule 16); a reasonable amount of product may be donated to engine manufacturers and airport and airline operators to test, for the purpose of securing approval of such products.

2. Donating money, prizes, products or other things of value, either directly or indirectly, conditioned upon or in connection with the purchase of petroleum products. Supplying company-owned or chartered ships are excepted. (Rules 6 and 16).

3. Carrying newspaper, display or other advertisements for the benefit of airport operators or other companies or persons not affiliated with the advertising company. This does not prohibit a company advertising its own products, stating that designated airports, operators or other companies or persons are using such products. (Rule 16).

TO TREBLE CAPACITY OF PARAGON REFINERY

TOLEDO, Ohio, Aug. 18.—More than $2,000,000 will be spent in tripling the capacity of Paragon Refining Co.'s refinery here by addition of two stills of 9,000 bbls. capacity each. Paragon Refining Co.'s assets will be sold to Gulf Oil Co. on September 12 for approximately $10,000,000, excluding cash, notes and accounts receivable and majority stock of Valvoline Oil Co.

LOUISIANA OIL EXPANDS

NEW YORK, Aug. 18.—Louisiana Oil Refining Corp., which is conducting an expansion program in its retail marketing division, added 56 controlled filling stations to its chain during July, it is announced at company headquarters here.

As of July 31 the company had a total of 983 retail filling stations, owned, optioned, leased, and controlled. The company also operates 150 bulk plants.

MARTIN MANAGER

General management of the Gillette refinery at Gillette, Wyo., has been taken over by R. E. Martin. The plant has resumed operations and is again producing gasoline and tractor fuel for the local market.

JOINS IOWA PARK

L. E. (Jack) Diamond has joined the Iowa Park Producing & Refining Co. at Iowa Park, Tex., as assistant superintendent. He was formerly with the Graver Corp. in California.

TWO MORE REFINERIES IN OKLAHOMA CITY

Two additional refineries are under construction in the Oklahoma City Field which when completed will bring the total number of plants to six in this area. D. M. Crump is building a 2,500-bbl. plant in the south portion of the field on the Frisco railroad and has the foundations completed and ready for installation of the equipment. The refinery will be operated under the name of the D. M. Crump Refineries, Inc., and in addition to the refinery, will operate 64 filling stations and five bulk plants in Oklahoma. C. C. Julian is understood to be negotiating for control of the plant, but the transaction has not been announced.

The other plant under construction is being built by Peabody & Peeveta, who have moved the equipment of the Red Wing plant at Russell, Kans., to the new location in the south end of the Oklahoma City Field. A 5-inch line will connect the plant with production in the south portion of the new field. When completed, this plant will have a capacity of 2,500 bbls. It is understool that C. C. Julian has a substantial interest in this plant, and the crude to be run will come from the company's wells.

The other plants in the Oklahoma City area include the new 1,000-bbl. refinery built by Dan Corcoran and operating as the Black Gold Oil Refining Co.; the Caravan Refining Co., formerly kown as the Home Refining Co. plant; the Electrol Refining Co. and the Red Seal refinery.

P. AND R. WEST TULSA REFINERY SHUT DOWN

As part of a program to curtail refinery operations in the Mid-Continent, the Producers & Refiners Corp. has closed down its refinery in West Tulsa for a period of 10 days and plans for the schedule of operation following this shutdown are contingent upon market conditions.

The company feels this method of doing its share in the general program of curtailing runs is definite, effective and most economical. There will be enough men kept at the plant to guard it against possible fires and to load cars from stocks but the greater number will be laid off for the period. A few construction jobs will be carried out, but the plant has been kept in good operating condition at all times and this also will require but few men.

The plant has a crude capacity of 6,000 bbls. and has Dubbs Cracking units of 3,000-bbl. capacity.

INVESTIGATE MONTANA RATES

Interstate Commerce Commission has ordered an investigation into the reasonableness of intrastate rates on petroleum in Montana, which became effective upon order of State Board of Railroad Commissioners.

Railroads serving Montana contend that the rates unduly prefer intrastate commerce and prejudice interstate traffic.

The case was set for hearing September 29, before Commissioner Porter and Examiner Koch at Helena, Mont.

ACKERMAN RESIGNS

CHICAGO, Aug. 19.—H. Ackerman has resigned as treasurer of James B. Berry & Sons Co. to take effect September 1. Mr. Ackerman has held this position for many years and is very well known in the trade. At present he is away from Chicago and his plans for the future have not been announced.

VACUUM OIL COMPANY ACQUIRES WHITE STAR

NEW YORK, Aug. 18.—As part of its program of marketing expansion in the interior of the United States, the Vacuum Oil Co. is acquiring White Star Refining Co., of Detroit, Mich. C. E. Arnott, president of Vacuum, states that an agreement has been reached looking to a union of the companies on the basis of 92½ shares of Vacuum stock for 100 shares of White Star. A sufficient amount of White Star capital stock, of which there are 320,000 shares of no-par value outstanding, has been pledged to assure completion of the transaction. An announcement may be made soon of the acquisition of an additional marketing company by Vacuum.

"The union of these two oil companies," Mr. Arnott states, "should be of particular advantage to the motoring public and to the trade in the states where White Star Refining Co. operates." White Star will continue to be operated as an individual unit, with no change in name, personnel or policies.

The White Star company, which was organized in Michigan in 1911, had total assets at the close of 1929 of $9,060,058, while book value amounted to $7,176,191, equal to $22.43 a share on the 320,000 shares of no-par capital stock. The company had no bonded debt or preferred stock. Last year was the best in point of net profits in its history, totaling $2,949,600 available for dividends, or $9.21 a share.

The company has two refineries, one at Trenton, Mich., and the other at Wood River, Ill., where gasoline and other petroleum products are produced. It also operates its own filling stations and sells to dealers in Michigan and nearby states.

CLAIM TO HAVE RECORD CLEAN-OUT ON DUBBS

The world's record for cleaning out a Dubbs reaction chamber is claimed by the operating men at the refinery of the H. F. Wilcox Oil & Gas Co. at Bristow, Okla.

A crew of 12 men recently shut down the unit, cleaned out the coke from the 10'x10' reaction chamber and had the unit back on stream in nine and one-half hours. This included handling about 80 tons of coke.

On a previous run the crew cleaned a chamber in 10 hours flat, thereby clipping 55 minutes from what was believed to be the previous record. That was held by the Ashland Refining Co. at Ashland, Ky., with a time from stream to stream of 10 hours and 55 minutes.

P. I. Tinkler is superintendent of the Bristow plant and L. J. Williams is in charge of the cracking department. The cleanout operation consists of "cutting" the fires in the furnace of the unit, dropping the plant pressure from 175 pounds to atmospheric, and steaming the tubes and reaction chamber.

After steaming for about 1½ hours, the reaction chamber is filled with water from the bottom upward to cool or "quench" the coke. The upper and lower manholes on the reaction chamber are then opened and the 4,200-foot cable is pulled out by means of a winch. Men then enter the chamber and scale off the fragments of coke still adhering to the walls. After the cleaning is finished, the cable is coiled back into place, the unit is plated up, the system is filled with oil, tested and fired up.

BUILD FUEL STORAGE

Great Lakes Steel Corp. has started construction of 500,000 bbls. of steel storage for fuel oil at its new plant at Ecorse, Mich. The storage system will be comprised of six 80,000-bbl. tanks and a number of smaller storage units.

EMPIRE TO SHUT DOWN ITS CUSHING REFINERY

BARTLESVILLE, Okla., Aug. 18.—The Empire Oil & Refining Co. will close down its Cushing, Okla., refinery within the next few days for an indefinite period. The company has taken this action partly as a result of the collective efforts of refiners in the Mid-Continent to curtail runs and partly because the company's new refinery in Chicago supplies sufficient capacity to supply more economically the needs of the company's stations in the north central states.

Should general conditions in the industry improve it is likely the operation of the Cushing plant will be resumed as the company has a considerable production of crude in the new Oklahoma City Field through the Indian Territory Illuminating Oil Co.

At the present time the activities of the refining branch of the Empire are fairly well centered in the Ponca City refinery, where a new topping unit and vacuum unit are being built. The plant will have a capacity of 12,000 bbls. after this work is completed. Although the plant is equipped to manufacture lubricating oils and, together with the Okmulgee plant, furnished all of the needs of the company's stations in the past, the bulk of the bright stock requirements for compounding were purchased on the open market. Within a few weeks the Ponca plant will include a new, ultra-modern bright stock plant to supply its needs.

After the Cushing plant is closed down the Empire will still have close to 20,000 bbls. capacity in its Mid-Continent plants when the Ponca City work is completed, and this, together with the new plant near Chicago, brings the total refining capacity to 45,000 bbls.

MEXICAN REFINERS TO ASK FOR HIGHER DUTY

NEW YORK, Aug. 18.—Oil companies operating refineries in Mexico have petitioned the Treasury Department to increase gasoline import taxes as a means of protecting the Mexican refining industry, according to reports from Mexico City.

The Mexican Treasury Department has referred the petitions to the committee on tariffs, and it will be heard in the near future, with representatives of the oil companies, the Treasury Department, and the Ministry of Industry, Commerce and Labor appearing.

As a result of high retail prices, the late President Obregon reduced gasoline import duties and organized co-operative associations for the distribution of gasoline.

Replying to the charge that higher import duties will raise gasoline costs to Mexican consumers, the Mexican refining companies have asked the Government to fix retail prices when and if the import duties are advanced.

BUY LITTLE & COFFIN OIL

Tide Water Oil Co. has purchased the business of Little & Coffin Oil Co., Portland, Me. Tide Water took possession of the Little & Coffin properties, effective August 1, 1930. Tide Water Oil Co., through this purchase has acquired 12 bulk plants, 21 service stations and over 600 retail dealer outlets.

D. A. LOCKE IS VICE PRESIDENT

MUSKEGON, Mich., Aug. 16.—D. A. Locke has been made vice president of the Old Dutch Construction Co., which controls the pipe lines and operation of the Old Dutch Refining Co. He is a son of George D. Locke, vice president in charge of sales of the Barnsdall Refineries, Inc.

Griscom-Russell

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The results of this long experience are shown in the many distinctive features of G-R Heat Transfer Apparatus, including their special provisions against leakage, high rate of heat transfer, low pressure drop, exceptional compactness and high salvage value.

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Milwaukee	Los Angeles
Detroit	Seattle
New Orleans	Denver

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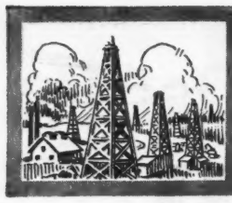
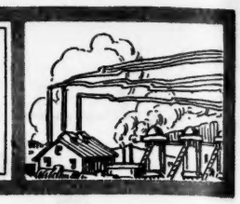


REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement unless otherwise noted.



GASOLINE AND NAPHTHA

	Aug. 19		Aug. 12		Aug. 5	
OKLAHOMA (Group 3)—						
50-52 450 endpoint	.06	.06¼	.06	.06¼	.06	.06¼
56-58 450 endpoint	.05¾	.06	.05¾	.06¼	.05¾	.06¼
*58-60 437 endpoint (U. S. Motor)	.0643		.0646		.0642	
*60-62 437 endpoint	†.06	.06¼	†.06	.06¼	†.06	.06¼
*60-62 400 endpoint	.0712		.0694		.06932	
*64-66 375 endpoint	†.06¾	.07	.06¾	.07	.0675	
68-70 360 endpoint	.07	.07¼	.07	.07½	.07	.07½
64-66 437 endpoint (blend)	.05½	.06	.05½	.06	.05½	.06
NORTH TEXAS—						
50-52 450 endpoint	.05¾		.05¾		.05¾	.06
58-60 450 endpoint	.05½	.05¾	.05½	.05¾	.05⅝	.05¾
58-60 437 endpoint (U. S. Motor)	.05½	.06	.05½	.06	.05⅝	.06
60-62 400 endpoint	.05⅞	.06⅛	.05⅞	.06⅛	.05⅞	.06⅛
64-66 390 endpoint	.06¼	.06½	.06¼	.06½	.06¼	.06½
64-66 375 endpoint	.06½	.06¾	.06½	.06¾	.06½	.06¾
68-70 360 endpoint	.06⅞	.07⅛	.06⅞	.07⅛	.06⅞	.07⅛
64-66 437 endpoint (blend)	.05½	.06	.05½	.06	.05½	.06
***NORTH LOUISIANA—**						
58-60 437 endpoint (U. S. Motor)	.06¾	.07	.06¾	.07	.06¾	.07
***ARKANSAS—**						
58-60 437 endpoint (U. S. Motor)	.06¾	.07	.06¾	.07	.06¾	.07
PENNSYLVANIA—						
52-54 Naphtha	.06¾		.07		.07	.07⅛
54-56 Naphtha	.07		.07		.07⅛	
58-60 Gasoline	.07½	.07½	.07¼	.07½	.07¼	.07½
60 Gasoline	.07½	.07¾	.07½	.07¾	.07½	.07¾
62 Gasoline	.08		.07¾	.08	.08	.08¼
64 Gasoline	.08	.08½	.08		.08¼	.08½
68-70 350 endpoint gasoline	.08¾		.08¾		.08¾	.09
CALIFORNIA—						
†58-60 437 endpoint (U. S. Motor) domestic	.09	.09½	.09½	.10	.09½	.10
†60-62 400 endpoint domestic gasoline	.09¾	.10¼				
CHICAGO DISTRICT (Based on Group 3)—						
50-52 450 endpoint (Naphtha)	.05½	.05¾	.06	.06¼	.05¾	.06
56-58 450 endpoint	.05¾	.06	.05¾	.06	.05¾	.06
58-60 437 endpoint (U. S. Motor)	.05¾	.06⅛	.05¾	.06¼	.05¾	.06½
60-62 400 endpoint	.05⅞	.06⅜	.06	.06½	.06	.06½
64-66 375 endpoint	.06⅝	.06⅞	.06¾	.07	.06¾	.07
68-70 360 endpoint	.06⅞	.07⅛	.07	.07¼	.07	.07¼
64-66 437 endpoint (blend)	.05½	.06	.05½	.06	.05½	.06
GULF COAST (Export)—						
58-60 U. S. Motor	.07	.07½	.08		.08	
60-62 400 endpoint	.08	.08½	.09		.09	
61-63 390 endpoint	.08½	.09	.09¼		.09¼	
64-66 375 endpoint	.09	.09½	.09½		.09½	

*Weighted average prices August 18, 11 and 4 as reported by representative refiners. Sales to jobbers only. †No sales reported. Prices show general market.

*Louisiana, Arkansas, Mississippi and East Texas delivery. †For local consumption.

NATURAL GASOLINE

	Aug. 19		Aug. 12		Aug. 5	
OKLAHOMA (Group 3)—						
Grade A, 72-79.9, 375 e.p., rec. 90%	.05½		.05½		.05	
Grade AA, 80-87.9, 375 e.p., rec. 90%	.05½		.05½		.05	
Grade B, 76-83.9, 375 e.p., rec. 85%	.05½		.05½		.04¾	
Grade BB, 84-92, 375 e.p., rec. 85%	.05½		.05½		.04¾	
Grade C, 80-92, 375 e.p., rec. 78%	.05⅝	.05½	.05⅝	.05½	.05½	.04¾
NORTH TEXAS—						
Grade A, 72-79.9, 375 e.p., rec. 90%	.05½		.05½		.05	
Grade AA, 80-87.9, 375 e.p., rec. 90%	.05½		.05½		.05	
Grade B, 76-83.9, 375 e.p., rec. 85%	.05½		.05½		.04¾	
Grade BB, 84-92, 375 e.p., rec. 85%	.05½		.05½		.04¾	
Grade C, 80-92, 375 e.p., rec. 78%	.05½		.05½		.04¾	
NORTH LOUISIANA—						
Grade AA, 80-87, 375 e.p., rec. 90%	.05½	.05⅝	.05½	.05⅝	.05	.05¼
Grade BB, 84-92, 375 e.p., rec. 85%	.05½		.05½		.04¾	
Grade C, 80-92, 375 e.p., rec. 78%	.05½		.05½		.04½	.04¾
CALIFORNIA—						
75-78, 375-390 endpoint	.07¼	.08	.07½	.08	.07½	.08
CHICAGO DISTRICT (Based on Group 3)—						
Grade A, 72-79.9, 375 e.p., rec. 90%	.05½		.05½		.05	
Grade AA, 80-87.9, 375 e.p., rec. 90%	.05½		.05½		.05	
Grade BB, 84-92, 375 e.p., rec. 85%	.05½		.05½		.04¾	

*Louisiana, Arkansas, Mississippi and East Texas delivery.

BURNING OIL

	Aug. 19		Aug. 12		Aug. 5	
OKLAHOMA (Group 3)—						
41-43 water white kerosene	.03	.03½	.03	.03½	.03⅛	.03½
42-44 water white kerosene	.03½	.03¾	.03½	.03¾	.03½	.04
NORTH TEXAS—						
41-43 water white kerosene	.03	.03¼	.03	.03¼	.03	.03¼
40-41 water white kerosene	.02⅞	.03	.02⅞	.03	.02⅞	.03
***NORTH LOUISIANA—**						
41-43 water white kerosene	.04	.04¼	.04	.04¼	.04	.04¼
***ARKANSAS—**						
41-43 water white kerosene	.04	.04¼	.04	.04¼	.04	.04¼
PENNSYLVANIA—						
43 Kerosene prime white	.04¼		.04¼		.04¼	
45 Kerosene water white	.04½		.04½		.04¼	.04½
46 Kerosene water white	.04¾	.05	.04¾	.05	.04¾	.05
300 Mineral Seal	.05½		.05½		.05¾	.06
CALIFORNIA—						
38-40 water white Kero. (high burning test)	.04½	.05	.04	.04½	.04	.04½
CHICAGO DISTRICT (Based on Group 3)—						
41-43 water white kerosene	.03	.03¼	.03	.03½	.03⅛	.03⅜
42-44 water white kerosene	.03½	.03¾	.03½	.03¾	.03½	.03¾
GULF COAST (Export)—						
41-43 prime white	.06		.06		.06	
41-43 water white	.07		.07		.07	

*Louisiana, Arkansas, Mississippi and East Texas delivery.

FUEL OIL

	Aug. 19		Aug. 12		Aug. 5	
OKLAHOMA (Group 3)—						
Below 18 Fuel Oil, per bbl.	.45	.50	.45	.50	.45	.50
18-22 Fuel Oil, per bbl.	.47½	.50	.47½	.50	.47½	.50
20-22 Fuel Oil, per bbl.	.50	.57½	.50	.57½	.50	.57½
22-26 Fuel Oil, per bbl.	.55	.60	.55	.60	.55	.60
24-26 Fuel Oil, per bbl.	.06	.65	.60	.65	.60	.65
26-30 Fuel Oil, per bbl.	.70	.75	.70	.75	.70	.75
28-30 Fuel Oil, per bbl.	.77½	.82½	.77½	.82½	.77½	.82½
32-36 Gas Oil (industrial)	.02⅛	.02¼	.02⅛	.02¼	.02⅛	.02¼
32-36 Gas Oil (straw color)	.02¼	.02½	.02¼	.02½	.02¼	.02½
36-38 Distillate	.02⅝	.02¾	.02⅝	.02¾	.02⅝	.02¾
38-40 Straw Distillate	.02¾	.03	.02¾	.03	.02¾	.03
NORTH TEXAS—						
Below 20 Fuel Oil, per bbl.	.40	.50	.40	.50	.40	.50
24-26 Fuel Oil, per bbl.	.60	.65	.60	.65	.60	.65
32-36 Gas Oil (industrial)	.02	.02⅛	.02	.02⅛	.02	.02⅛
38-40 Straw Distillate	.02¾	.03	.02¾	.03	.02¾	.03
***NORTH LOUISIANA—**						
18-20 Fuel Oil, per bbl.	.75	.80	.75	.80	.75	.80
30-32 Gas Oil	.02⅜	.02¾	.02⅜	.02¾	.02⅜	.02¾
***ARKANSAS—**						
33-36 Distillate	.02¾	.03	.02¾	.03	.02¾	.03
30-32 Gas Oil	.02⅜	.02½	.02⅜	.02½	.02⅜	.02½
16-22 Refinery Fuel Oil, per bbl.	.60	.70	.60	.70	.60	.70
GULF COAST (South Texas)—						
Gas Oil	.03¾	.04	.03¾	.04	.03¾	.04
Bunker C Fuel (cargo lots), per bbl.	.75	.80	.75	.80	.75	.80
Bunker C Fuel (small lots)	1.05	1.10	1.05	1.10	1.05	1.10
PENNSYLVANIA—						
30-34 Fuel Oil	.03¼		.03	.03¼	.03⅛	.03¼
36-40 Fuel Oil	.03½	.03¾	.03¼	.03½	.03¼	.03½
CALIFORNIA—						
33-36 Distillate	.02¼	.02½	.02½	.03	.02½	.03
26-32 Distillate	.01¾	.02	.01¾	.02	.01¾	.02
15-20 Fuel Oil, Bunker (at tidewater)	.65	.75	.65	.75	.65	.75
15-20 Fuel Oil (cargo lots), per bbl.	.60	.70	.60	.70	.60	.70
27 plus Diesel, per bbl.	.80	.90	.80	.90	.80	.90
CHICAGO DISTRICT (Based on Group 3)—						
22-26 Fuel Oil, per bbl.	.55	.60	.57½	.62½	.57½	.62½
18-22 Fuel Oil, per bbl.	.47½	.50	.47½	.52½	.47½	.52½
28-30 Fuel Oil, per bbl. (zero)	.75	.80	.77½	.82½	.77½	.82½
32-36 Gas Oil (zero)	.02⅜	.02⅝	.02½	.02⅝	.02½	.02⅝
32-36 Gas Oil (industrial)	.02⅛	.02⅜	.02⅛	.02¼	.02⅛	.02¼
38-40 Straw Distillate	.02⅝	.02⅞	.02¾	.02⅞	.02¾	.02⅞

*Louisiana, Arkansas, Mississippi and East Texas delivery.

LUBRICATING OIL AND WAX

	Aug. 19		Aug. 12		Aug. 5	
OKLAHOMA (Group 3)—						
100 vis., 2 color, 20-25 cold test	.06	.06½	.06	.06½	.06	.06½
100 vis., 3 color, 20-25 cold test	.05½	.06	.05½	.06	.05½	.06
150 vis., 3 color, 20-25 cold test	.07¼	.07½	.07¼	.07½	.08	.08½
150 vis., 4 color, 20-25 cold test	.07		.07		.07½	.08
180 vis., 3 color, 23-28 cold test	.08½	.09	.08½	.09	.09½	.10
180 vis., 4 color, 23-28 cold test	.08¼	.08½	.08¼	.08½	.09	.09½
180 vis., 5 color, 23-28 cold test	.08		.08		.08½	.09
200 vis., 3 color, 23-28 cold test	.10	.10½	.10	.10½	.11	.11⅛
200 vis., 4 color, 23-28 cold test	.09½	.10	.09½	.10	.10½	.11
200 vis., 5 color, 23-28 cold test	.09¼	.09½	.09¼	.09½	.10	.10¼
240 vis., 3 color, 25-30 cold test	.13½	.14	.13½	.14	.14½	.15
240 vis., 4 color, 25-30 cold test	.12½	.13	.12½	.13	.13½	.14
240 vis., 5 color, 25-30 cold test	.11½	.12	.11½	.12	.12½	.13
280 vis., 3 color, 25-30 cold test	.15½	.16	.15½	.16	.16½	.17
280 vis., 4 color, 25-30 cold test	.14½	.15	.14½	.15	.15½	.16
280 vis., 5 color, 25-30 cold test	.13½	.14	.13½	.14	.14½	.15
Cylinder Stocks:						
600, steam refined, light green	.08	.12	.08	.12	.08	.11
600, steam refined, dark green	.06	.08	.06	.08	.06	.08
190-200 vis., D color, Bright Stock	.30		.30		.33	
150-160 vis., D color, Bright Stock	.25		.25		.28	.32
*150-160 vis., D color, Bright Stock	.23	.25	.23	.25	.26	.28
150-160 vis., E color, Bright Stock	.23		.23		.24	.26
Waxes:						
124-126 White Crude Scale Wax	.02	.02⅛	.02	.02⅛	.02	.02⅛

*Hight cold test. All bright stock prices are for domestic movement.

PENNSYLVANIA—						
34 Neutral	.05¾	.06½	.05¾	.07	.05¾	.06½
34 Sundebloom	.05½		.05½		.05½	.06
36 Miners' Neutral	.05¾		.05¾		.05¾	.06
150, 3 color	.12	.14	.12	.14	.12½	.14
180, 3 color	.16	.17	.16	.18	.16	.18
200, 3 color	.18½	.20	.18½	.21	.18½	.20
220, 3 color	.23		.23	.24	.23	.23½
600, steam refined	.11	.11½	.11	.11½	.10½	.11
635, steam refined	.13½	.17	.13½	.17	.15½	.17
650, steam refined	.15½	.17	.15½	.16	.16	.19
600, Pennsylvania Flash	.18	.19½	.18	.19	.19	.21
630, Pennsylvania Flash	.26	.28	.26	.27	.28	.29
600, E filtered	.15½	.17	.16	.17	.16½	.18
600, D filtered	.19	.21	.19	.22	.20	.22
Pennsylvania Bright Stocks	.25		.25		.25	.26
*122-124 White Crude Scale Wax	.02¼		.02¼		.02¼	
124-126 White Crude Scale Wax	.02¼		.02¼		.02¼	

*At New York.

GULF COAST (South Texas)—						
100 vis., 2-2½ color, pale oil	.06½	.06¾	.06½	.06¾	.06½	.06¾
200 vis., 3 color, pale oil	.09½		.09½		.09½	
300 vis., 3 color, pale oil	.10¾		.10¾		.10¾	
500 vis., 3½ color, pale oil	.12	.12¾	.12	.12¾	.12	.12¾
750 vis., 3½ color, pale oil	.13½		.13½		.13½	
1,200 vis., 3½ color, pale oil	.16		.16		.16	

REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement unless otherwise noted.

2,000 vis., 6 plus color, red oil	.17		.17		.17	
200 vis., 5-6 color, red oil	.08¾	.09	.08¾	.09	.08¾	.09
300 vis., 5-6 color, red oil	.10	.10¼	.10	.10¼	.10	.10¼
500 vis., 5-6 color, red oil	.11¼		.11¼		.11¼	
750 vis., 5-6 color, red oil	.12¾	.13	.12¾	.13	.12¾	.13
1,200 vis., 5-6 color, red oil	.15		.15		.15	
2,000 vis., 4 color, pale oil	.17		.17		.17	
200 vis., 2½ color, filtered oil	.11	.12	.11	.12	.11	.12
300 vis., 2½ color, filtered oil	.12	.13	.12	.13	.12	.13
CALIFORNIA—						
130 vis., 2½-3 color	.10¼	.10½	.10¼	.10½	.10¼	.10½
200 vis., 2½-3 color	.11½	.11¾	.11½	.11¾	.11½	.11¾
300 vis., 3-3½ color	.13	.13½	.13	.13½	.13	.13½
350 vis., 3½-4 color	.13½	.13¾	.13½	.13¾	.13½	.13¾
400 vis., 3½-4 color	.15	.15½	.15	.15½	.15	.15½
Red Neutral:						
200 vis., 4½-5 color	.11	.11¼	.11	.11¼	.11	.11¼
300 vis., 5-6 color	.12	.12¼	.12	.12¼	.12	.12¼
400 vis., 5-6 color	.13¼	.14	.13¼	.14	.13¼	.14
500 vis., 4½-5 color	.15¼	.15½	.15¼	.15½	.15¼	.15½
500 vis., 5-6½ color	.15	.15¼	.15	.15¼	.15	.15¼
600 vis., 6½ plus color	.16	.16¼	.16	.16¼	.16	.16¼

Note—Bright stocks are not manufactured commercially on the Pacific Coast.

NEW YORK (BAYONNE) REFINERY PRICES

	Aug. 19		Aug. 12		Aug. 5	
Gasoline, U. S. Motor, 58-60, 437 e.p.	.08	.10	.08	.10	.08	.10
Kerosene, water white, 41-43	.06¾		.06¾		.06¾	
*Fuel Oil, Bunker "C," 41-43	1.15		1.15		1.15	
Fuel Oil, Diesel, 28-30, per bbl.	2.00		2.00		2.00	
Gas Oil, 32-36 gravity	.04¾	.05¼	.04¾	.05¼	.04¾	.05¼
25 pale Paraffin Oil, tank car	.10¼		.10¼		.10¼	
28 pale Paraffin Oil, tank car	.07¼		.07¼		.07¼	
280 red Paraffin Oil, tank car	.12½		.12½		.12½	
250 red Paraffin Oil, tank car	.11½		.11½		.11½	
225 red Paraffin Oil, tank car	.10		.10		.10	
200 red Paraffin Oil, tank car	.09¼		.09¼		.09¼	
Refined Wax:						
120-122 a.m.p., per lb.	.03		.03		.03	
125-127 a.m.p., per lb.	.03⅜		.03¼		.03¼	
130-132 a.m.p., per lb.	.03⅝		.03⅝		.03½	
133-135 a.m.p., per lb.	.04½		.04½		.04½	
135-137 a.m.p., per lb.	.04⅝		.04⅝		.04⅝	
Petrolatum in barrels, in carload lots, per pound:						
Dark Green	.01¾		.01¾		.01¾	
Amber	.03½		.03¼		.03¼	
Extra Amber	.03⅜		.03⅜		.03⅜	
Cream	.06		.06		.06	
Lily White	.06⅜		.06⅜		.06⅜	
Snow White	.08		.08		.08	

*Lighterage 5.0 cents a barrel extra.

NEW YORK (BAYONNE) EXPORT PRICES

	Aug. 19		Aug. 12		Aug. 5	
600, steam refined cylinder stocks, in bbls.	17½		.18½	.19	.18½	.19
635, steam refined	.19½		.20½	.21	.20½	.21
650, steam refined	.23½		.24½	.25	.24½	.25
600, Pennsylvania Flash	.28		.28		.28	
630, Pennsylvania Flash	.31		.31		.31	
600, Warren E	.25		.26		.26	
600, Oil City E	.24		.25		.25	
Light 140-150 Bright Stocks	.32	.33	.33		.33	
Dark 140-150 Bright Stocks	.30	.31	.31		.31	

LOS ANGELES EXPORT PRICES

	Aug. 19		Aug. 12		Aug. 5	
Kerosene, water white	.03¾	.04½	.03¾	.04½	.03¾	.04½
*U. S. Motor Gasoline, 53-55, 437 e.p.	.06½	.06¾	.06½	.06¾	.06½	.06¾
*60-62 400 endpoint gasoline	.08½	.09				

*Prices on coastwise shipments.

CRUDE OIL PRICES

OKLAHOMA, KANSAS, NORTH AND EAST CENTRAL TEXAS

Oklahoma City—Same as other Mid-Continent price schedule except Empire Pipe Line Co. posted all oil 40 gravity and above at $1.43 on April 10.

Corsicana heavy (April 10, 1930).....$ .80
Other fields.....See gravity table

TEXAS PANHANDLE

Gray County, Wheeler County and Carson-Hutchinson Counties—See gravity table.

In Noel-McConnell district, Prairie Oil & Gas Co. posted April 10, below 30 degrees, 75½ cents, with 5-cent differential upward to 34-34.9, $1.00½, and then a 3-cent differential upward to 44 and above at $1.35½.

WEST TEXAS

Iatan*.....Same as North Texas
Crane-Upton-Crockett, Pecos, Winkler
Mitchell and Ector
.....See gravity table, Column 3
Howard and Glasscock
.....See gravity table, Column 9
Chalk† (April 10, 1930).....$ .75

*Includes Westbrook Field. †Posted by Humble Oil & Refining Co.

ARKANSAS-NORTH LOUISIANA

Smackover, below 24 gravity (April 11, 1930).....$ .90
Smackover, 24 gravity and above (April 11, 1930).....1.05
Carterville, Sarepta and Cotton Valley, below 36 gravity (April 11, 1930).....85
Bellevue (April 11, 1930).....1.15
Urania (April 11, 1930).....95
East El Dorado (April 11, 1930).....90
Other fields.....See gravity table
Cotton Valley crude above 36 gravity takes same gravity price schedule as shown for North Louisiana and Arkansas crude in Mid-Continent gravity price table.

Note—Smackover, Cotton Valley and Bellevue posted by Standard Oil Co. Louisiana and Magnolia Petroleum Co.; Urania posted by Louisiana Oil Refining Corp.; East El Dorado posted by Magnolia Petroleum Co.

Grade A (April 10, 1930)*.....$1.15
Grade B, 25 degrees and upward .....
.....See gravity table
Jennings, La. (April 10, 1930)†.....1.10
Refugio (light).....Same as Grade B
Refugio (heavy) (April 10, 1930)‖.....85
Sorrento (April 10, 1930)‡.....1.10
Markham (April 10, 1930)§.....85
High Island (April 10, 1930)¶.....95

*Humble Oil & Refining Co. †Gulf Pipe Line Co. ‡Sun Pipe Line Co. §The Texas Pipe Line Co. ‖Posted by Gulf Pipe Line Co. ¶Humble Oil & Refining Co. and Gulf Coast Pipe Line Co.

(Continued on Page 142)

CRUDE OIL GRAVITY TABLE

Gravity—	1 Okla.-Kans.	2 N. C. Texas No. La., Arkansas	3 Crane, Upton, Ector, Crockett, Winkler, Pecos, Mitchell. (West Texas) Lea, N. Mex.	4 Wheeler County (Texas Panhandle)	5 Gray County (Texas Panhandle)	6 Carson and Hutchinson (Texas Panhandle)	7 Salt Creek, Wyo.	8 Stephens, Ark.	9 Howard-Glasscock (West Texas)	10 Grade B Gulf Coast and Refugio Texas
Below 25	.75	.72	.65	....	....	....	....	....	.65	1.00
25 to 25.9	.80	.77	.68	....	....	....	....	....	.68	1.03
26 to 26.9	.85	.82	.71	....	....	....	....	....	.71	1.06
27 to 27.9	90	87	74	....	....	....	....	.76	74	1.09
28 to 28.9	.95	.92	.77	....	.75½	....	....	81	76	1.12
29 to 29.9	1.00	.97	.80	.75½	.80½	....	1.00	96	.78	1.16
30 to 30.9	1.05	1.02	.83	.80½	.85½	....	1.05	91	.80	1.18
31 to 31.9	1.10	1.07	.86	.85½	.90½	.77½	1.10	.96	.82	1.21
32 to 32.9	1.15	1.12	.89	.90½	.95½	.82½	1.15	1.01	.84	1.24
33 to 33.9	1.18½	1.17	92	.95½	1.00½	.87½	1.18½	....	.86	1.27
34 to 34.9	1.22	1.22	.95	1.00½	1.05½	.92½	1.22	....	.88	1.30
35 to 35.9	1.25½	1.25½	.98	1.04	1.09	.96	1.25½	....	.90	1.33
36 to 36.9	1.29	1.29	1.01	1.07½	1.12½	.99½	1.29	....	.92	1.36
37 to 37.9	1.32½	1.32½	....	1.11	1.16	1.03	1.32½	....	....	1.39
38 to 38.9	1.36	1.36	....	1.14½	1.19½	1.06½	....	....	....	1.42
39 to 39.9	1.39½	1.39½	....	1.18	1.23	1.10	....	....	....	1.44
40 to 40.9	1.43	1.43	....	1.21½	1.26½	1.13½	....	....	....	1.46
41 to 41.9	1.46½	1.46½	....	1.25	1.30	1.17	....	....	....	1.48
42 to 42.9	1.50	1.50	....	1.28½	1.33½	1.20½	....	....	....	1.50
43 to 43.9	1.53½	1.53½	....	1.32	1.37	1.24	....	....	....	1.52
44 and above	1.57	1.57	....	1.35½	1.40½	1.27½	....	....	....	1.54

Column 1, Note—Above prices posted April 10, 1930, by Carter Oil Co. (beginning at 25° and below), and by the Prairie Oil & Gas Co. and other purchasers beginning at 24° and below, the Magnolia Petroleum alone excepted. The Magnolia on April 10 posted the following prices: Below 26 gravity, 70 cents; 26-26.9, 76 cents; 27-27.9, 82 cents; 28-28.9, 88 cents; 29-29.9, 95 cents; 30-30.9, $1.02. From 31 and up and including 44°, and above Magnolia followed Carter price schedule, but made its whole schedule apply to its gravity purchases in Kansas, Oklahoma and North Central Texas alike.

Column 2—Humble Oil & Refining Co. posted above prices April 10, 1930, and was followed by all other companies in Texas except Magnolia which posted a different price schedule than Humble up to 35.9° (See note in paragraph just above). The Texas Company posted North Louisiana and Arkansas on April 10, and Standard of Louisiana posted on April 11, followed by other companies, but Magnolia's price schedule begins with below 28 gravity at 87 cents. North Central Texas includes North Texas, Ranger, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie, Nocona, Moran and Corsicana light. Arkansas and Louisiana pools include Caddo, Bull Bayou, Crichton, Cotton Valley (above 36 gravity), DeSoto, Haynesville, Homer, El Dorado and Rainbow .

Column 3—Posted by Humble Oil & Refining Co. April 10 ,1930, and Magnolia Petroleum Co. April 10, 1930.

Columns 4, 5 and 6—Humble Oil & Refining Co., Prairie Oil & Gas Co., Magnolia Petroleum Co., April 10, 1930.

Column 7—Mid-West Refining Co. April 11. All crude over 37 gravity $1.32½.

Column 8—Louisiana Oil & Refining Co., April 11.

Column 10—Humble Oil & Refining Co., April 10. Magnolia Petroleum Co. posted below 25 gravity, 65 cents, with 3-cent differential upward to and including 36 and above, which was posted at $1.01.

CALIFORNIA CRUDE OIL PRICES

Standard Oil Co.-Union Oil Co. (Effective March 11, 1930)

Gravity—	1 Seal Beach, Salt Lake, Newport, Summerland, Lawndale, Los Angeles, Fullerton, Richfield, Torrance, Olinda-Brea, Alamitos Heights, Huntington Beach, Signal Hill, Inglewood	2 Whittier, La Habra, Coyote Hills	3 Midway-Sunset, Elk Hills, Lost Hills, Belridge, Buena Vista Hills	4 Montebello	5 Santa Fe Springs (June 14, 1930)	6 Santa Maria, Coalinga	7 Wheeler Ridge, Fruitvale	8 Orcutt, Ventura, Rincon	9 Ventura Avenue (Nov. 8)	10 Elwood Terrace	11 Athens, Rosecrans Dominguez
14 to 14.9	.70	.70	.55	.70	....	.55	.55	.55	.70	....	....
15 to 15.9	.70	.70	.55	.70	....	.55	.55	.55	.70	....	....
16 to 16.9	.70	.70	.55	.70	....	.55	.55	.55	.70	....	....
17 to 17.9	.70	.70	.55	.70	....	.55	.55	.55	.70	....	....
18 to 18.9	.76	.76	.62	.71	....	.62	.62	.65	.76	....	....
19 to 19.9	.82	.82	.70	.77	....	.70	.70	.70	.82	....	....
20 to 20.9	.88	.87	.78	.83	....	.78	.78	.78	.88	....	....
21 to 21.9	.94	.93	.86	.90	.92	86	.86	.90	.91	....	....
22 to 22.9	1.00	.98	.94	.97	.95	.94	.94	.95	.94	....	....
23 to 23.9	1.07	....	1.02	1.05	1.01	1.02	1.02	1.02	1.00	....	....
24 to 24.9	1.14	....	1.09	1.11	1.07	1.07	1.07	1.10	1.07	....	1.14
25 to 25.9	1.21	....	1.16	1.17	1.13	1.12	1.12	1.18	1.14	....	1.19
26 to 26.9	1.28	....	1.23	1.23	1.19	1.17	1.17	1.26	1.21	....	1.24
27 to 27.9	1.35	....	1.30	1.29	1.25	1.23	1.22	....	1.28	....	1.29
28 to 28.9	1.42	....	1.35	1.35	1.31	1.27	....	....	1.35	....	1.34
29 to 29.9	1.46	....	1.41	1.38	1.37	1.31	....	....	1.39	....	1.39
30 to 30.9	1.50	....	1.47	1.41	1.41	1.35	....	....	1.43	....	1.45
31 to 31.9	1.55	....	1.53	....	1.49	1.39	....	....	1.48	....	1.51
32 to 32.9	1.60	....	1.59	....	1.55	1.43	....	....	1.53	....	1.57
33 to 33.9	1.65	....	1.65	....	1.60	1.47	....	....	1.59	....	1.64
34 to 34.9	1.70	....	....	....	1.65	1.51	....	....	1.65	1.32	1.71
35 to 35.9	1.75	....	....	....	1 70	1.55	....	....	1.71	1.39	1.78
36 to 36.9	1.80	....	....	....	1.75	....	....	....	....	1.46	1.84
37 to 37.9	1.85	....	....	....	1.80	....	....	....	....	1.53	1.90
38 to 38.9	1.90	....	....	....	1.85	....	....	....	....	1.60	1.96
39 to 39.9	....	....	....	....	1 90	....	....	....	....	1.66	2.02
40 to 40.9	....	....	....	....	....	....	....	....	....	1.72	2.08
41 to 41.9	....	....	....	....	....	....	....	....	....	1.78	2.14
42 to 42.9	....	....	....	....	....	....	....	....	....	1.84	2.20

Kern River, Newhall-McKittrick, Mount Poso and Round Mountain, 11 to 13.9 gravity, 50 cents; 14 gravity and above 55 cents, effective March 11. On March 11, the Union Oil Co. posted Midway-Sunset, Elk Hills, Buena Vista, Lost Hills and Coalinga crude as follows: 11 to 13.9 gravity at 50 cents.

Column 1—Signal Hill, Seal Beach, Huntington Beach and Alamitos Heights crude, 14 to 32.9 gravity, inclusive; Richfield, Olinda-Brea and Fullerton, 14 to 30.9 gravity; Torrance and Inglewood, 14 to 28.9 gravity.

Column 2—Whittier crude, 14 to 22.9 gravity; Coyote Hills, 14 to 30.9 gravity.

Column 3—Kern River, Newhall and McKittrick, 11 to 19.9 gravity; Midway-Sunset Buena Vista and Elk Hills, 11 to 33.9 gravity; Lost Hills, 11 to 34.9 gravity; oil below 14 gravity posted at 50 cents.

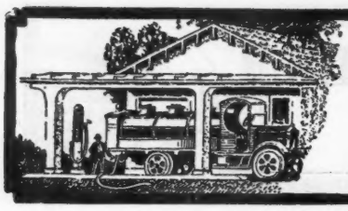
Column 5—Price change posted by Standard of California, June 14.

Column 6—Oil below 14 gravity posted at 45 cents.

Columns 8 and 9—Posted by Union Oil Co. only.

Column 10—Standard posted price f.o.b. tanker.

Kettleman Hills, 55 gravity and above, $1.65 (posted by Standard Oil Co. of California).



TANK WAGON MARKETS

Tank wagon quotations for gasoline and kerosene in United States as furnished by the larger marketing concerns August 19

ALL TANK WAGON AND SERVICE STATION QUOTATIONS INCLUDE TAXES

STANDARD OIL CO. (INDIANA)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Chicago†	18.0	19.0	3.0	13.0
Decatur, Ill.	18.2	19.2	3 0	13.1
E. St. Louis	17.4	18.4	3.0	12.2
Joliet	18.4	19.4	3.0	13.3
Peoria	18.2	19.2	3.0	13.1
Quincy	18.2	19.2	3.0	13.9
Davenport, Ia.	18.5	19.5	3.0	13.3
Des Moines	18.5	19.5	3.0	13.3
Keokuk	18.5	19 5	3.0	13.3
Sioux City	18.1	19.1	3.0	12.9
Duluth, Minn.	19.6	20.5	3.0	13.9
Mankato	19.1	20.1	3.0	13.7
Minneapolis	19.2	20.2	3.0	13 9
LaCrosse, Wis.	18.2	19.2	3.0	14.0
Milwaukee	17.1	18.1	2.0	12.9
Madison	17.3	18.3	3 0	13.1
Detroit, Mich.	18.8	19.8	3.0	14.7
Grand Rapids	18.7	19.7	3.0	14.6
Saginaw	18.9	19.9	3 0	14.8
Evansville, Ind.	19.0	20.0	4.0	14.0
Fort Wayne	19.4	20.4	4.0	14.4
Indianapolis	19.2	20.2	4.0	14.2
South Bend	19.4	20 4	4.0	14.4
Fargo, N. D.	20.9	21.9	3.0	15.9
Huron, S. D.	20.3	21.3	4.0	14.7
Sioux Falls	19.1	20.1	4.0	14.4
K. C., Mo.*	17.9	18.9	3 0	11.6
Springfield*	17.8	18.8	3.0	12.5
St. Louis*	16.9	17.9	2.5	12.3
St. Joseph	17.5	18.5	2.0	12.2
Wichita, Kans.	16.8	14.8	3.0	11.8
Bartlesville, Ok.	17.5	20.5	4.0	11.5

*State tax 2 cents; remainder city tax.

†Effective June 3, discounts on Q.D.A. in Chicago district 4 cents off service station price on purchases of 500 gallons or more per month and 5 cents on purchases of 1,000 gallons or more per month.

Effective August 5, the following quantity discounts from the service station price are allowed on monthly sales of gasoline: 500 gallons or more, 3 cents; 75,000 gallons or more, 4½ cents. Discounts are allowed each month and they are not cumulative. Delivery tickets showing date and quantity delivered must be sent to the seller before the tenth of the month to secure the discount on the previous month's purchases.

ROCKY MOUNTAIN DISTRICT

Continental Oil Co.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Denver, Colo.	16.0	19 0	4.0	15.5
Pueblo	17.0	20.0	4.0	15.5
Grand Junction	21.5	24.5	4.0	19.0
Casper, Wyo.	19.0	22.0	4.0	14.0
Cheyenne	20.5	23 5	4.0	15.5
Butte, Mont.	24 5	22.0	5 0	20 0
Billings	24.5	27.5	5.0	18.5
Great Falls	24.5	27.5	5.0	20.0
Helena	24.5	27.5	5.0	20.0
Salt Lake, Utah	20.0	23.0	3.5	17.0
Albu'que, N. M.	14.0	18.0	5 0	15 0
Boise, Idaho	23.5	26.5	5.0	19.0
Twin Falls	23.5	27.5	5.0	19.0

CENTRAL SOUTH DISTRICT

Standard Oil Co. (Louisiana)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
N. Orleans, La.*	14.5	14.5	5.0	12.0
Baton Rouge	16.5	16.0	4.0	14.0
Alexandria†	17.5	18.0	5.0	13.0
Lafayette*	17.5	18.0	5.0	13.0
Lake Charles*	17.5	18.0	5.0	13.0
Shreveport	16.5	17.5	4.0	13 0
Knoxv'le, Tenn.	19.5	20.0	5.0	16.0
Memphis	17.0	17.0	5.0	12.5
Chattanooga	19.5	20.0	5.0	13.0
Nashville	18.5	19.0	5.0	16.0
Bristol	19.5	21.5	5.0	14.0
Lt. Rock, Ark.	17.0	17.0	5.0	13.0

*Includes city tax of 1 cent. Louisiana kerosene prices include 1-cent state tax. New Orleans kerosene price also includes 1-cent city tax.

†Gasoline price at Alexandria includes 1-cent tax in parish of Rapides.

SOUTHWESTERN DISTRICT

Magnolia Petroleum Co.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Dallas, Tex.	14.0	18.0	4 0	12.0
Fort Worth	14.0	17.0	4.0	11.0
Houston	15.0	19.0	4.0	11.0
San Antonio	13.0	17.0	4.0	11.0
El Paso	16.0	20.0	4.0	13.0
Texarkana	14.0	15.0	4.0	12.0
Muskogee*	16.0	19.0	4.0	9.0
Okla. City*	15.0	18.0	4.0	10.0
Tulsa*	16.0	20.0	4.0	10.0
Ft. Smith, Ark.	14.0	15.0	5.0	13.0
Little Rock	17.0	17.0	5.0	13.0

*Gasoline tank wagon price to dealers 2 cents under posted tank wagon.

PENNSYLVANIA—DELAWARE AND PART NEW ENGLAND

The Atlantic Refining Co.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Pittsburgh, Pa.	16.0	*21.0	...	13 0
Philadelphia	16.0	*21.0	...	13.0
Scranton	16.0	*21.0	...	13.0
Allentown	16.0	*21 0	...	13.0
Altoona	16.0	*21.0	...	13.0
Erie	15.0	*19.0	...	13 0
Dover, Del.	19.0	21.0	3.0	13.0
Wilmington	19.0	21.0	3.0	13 0
Springf'd, Mass.	17.5	19.5	2.0	12.5
Worcester	17.3	19.3	2.0	12.3
Boston	16 5	18.5	2.0	11.5
Providence, R.I.	16.7	18.7	2.0	11.7
Hartford, Conn.	17.5	19.5	2.0	12.5
New Haven	17.6	19.6	2.0	12.6

*Includes tax of 3 cents. Pennsylvania tax is collected by the dealer and paid by him direct to the State. The Atlantic Refining Co. recognizes a 2-cent per gallon discount on gasoline from its posted tank wagon markets on sales to dealers for purposes of resale. The Atlantic Refining Co. also recognizes a maximum discount of 2 cents per gallon on gasoline to commercial accounts under contract for one year.

PACIFIC COAST TERRITORY

Standard Oil Co. (California)

	Gasoline			Kero.
	Wholesale price	Retail price	Incl'ds tax of	tank wagon
Fresno	19.0	17.0	3.0	17.0
San Francisco	19 0	12.0	3.0	15.5
Los Angeles	18.5	16.5	3.0	15.5
Reno, Nev.	24.0	22.0	4.0	19.0
Portland, Ore.	20.5	18.5	4.0	16.5
Seattle, Wash.	19.5	12 5	3.0	16.5
Tacoma	19.5	17.5	3.0	16.5
Spokane	21.5	21.5	3.0	20.5
Phoenix, Ariz.	17.0	20.0	4.0	20.0

Above prices are at company's plant or depots as company does not operate stations. A6-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where the discount is 1 cent.

NEBRASKA

Standard Oil Co. (Nebraska)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Omaha	19.25	19.25	4.0	13.25
McCook	20.75	22.75	4.0	14.75
Norfolk	19.75	21.75	4.0	13.75
N. Platte	20 75	22.75	4.0	14.50
Scottsbluff	17.00	17.00	4.0	14.25

OHIO

Standard Oil Co. (Ohio)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Ohio points*	20.0	21.0	4.0	†14.0

*Dealers and commercial accounts 3 cents under tank wagon.

†Service station price 16 cents.

NEW YORK AND PART OF NEW ENGLAND DISTRICT

Standard Oil Co. (New York)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Albany N. Y.	17.6	19.6	2.0	15.6
New York*	16.3	18.3	2.0	14.3
Buffalo	17.8	19.8	2.0	14.8
Rochester	18.0	20.0	2.0	14.0
Syracuse	18.8	20.8	2.0	14.8
Boston, Mass.	16 5	18.5	2.0	13.5
Augusta, Me.	19.8	21.8	4.0	14.8
Manch't'r, N. H.	19.4	21.4	4.0	14.0
Burlington, Vt.	19.6	21.6	4.0	16.2

*Prices in steel barrels.

STANOLIND FURNACE OIL IN CHICAGO

Less than 100 gallons	9.0
100 to 349 gallons	8.0
350 gallons or more	7.5

Note—Outside Chicago furnace oil discount of 1 cent per gallon is given on deliveries of 100 to 349 gallons and 1½ cents on deliveries of 350 gallons or more.

NAPHTHA

	Tank wagon	Tank car
Oleum spirits	14.7	10.0
V. M. & P. naphtha	16.7	13.0
Cleaner's naphtha	17.0	14.9
Stanisol	17.0	15.4

Tank wagon prices f.o.b. Chicago; tank car prices f.o.b. Whiting.

ATLANTIC COAST DISTRICT

Standard Oil Co. (New Jersey)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Atlantic City	16.5	18.5	3.0	13.5
Newark, N. J.	15.5	17.5	2.0	12.5
Annapolis	18.0	20.0	4 0	13.0
Baltimore	17.2	19.2	4.0	10.5
Cumberland	19.0	21.0	4.0	14.0
Wash'gton, D.C.	15.7	17.7	2.0	12.7
Danville, Va.	19.8	21 8	5.0	13.8
Norfolk	18.3	20.3	5.0	11.0
Petersburg	19.3	21.3	5.0	13.3
Roanoke	19.0	20.0	5.0	14.0
Richmond	18 7	20 7	5 0	12 7
Charles'n, W.Va.	18.5	20.5	4.0	12.5
Keyser	19.1	21.1	4.0	14.1
Parkersburg	17.2	19.2	4.0	11.2
Wheeling	18.4	20.4	4 0	12.4
Charlotte, N. C.	20.3	20.3	5.0	14.3
Hickory	20.6	22.6	5.0	14.6
Mt. Airy	20.5	22.5	5 0	14.5
Salisbury	20.5	20.5	5.0	14.5
Charleston, S. C.	19.3	21.3	6.0	12.3
Columbia	21.3	23.3	6.0	14.3

A 2-cent per gallon discount off the gasoline tank wagon price is offered to dealers.

SOUTHERN DISTRICT

Standard Oil Co. (Kentucky)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax of	tank wagon
Atlanta, Ga.	19.0	21 0	6.0	14.5
Augusta	22.0	24.0	6.0	15.5
Macon	20.0	22.0	6.0	13.0
Savannah	20.0	22.0	6.0	14.0
Birm'ham, Ala.	16 0	18.0	5.0	14.5
Mobile	18.0	18.0	4.0	13.5
Montgomery	19.0	21.0	4.0	15.0
Clarks'le, Miss.	19.0	21.0	5.0	12.5
Jackson	17 0	19.0	5.0	13.0
Natchez	19.0	21.0	5.0	13.0
Gulfport	20.5	22.5	5.0	13.0
Vicksburg	19.0	21.0	5.0	13.0
Jack'ville, Fla.	19.0	21.0	6.0	14.0
Miami	21.0	23.0	6.0	14 0
Pensacola	19.0	19.0	6.0	13.5
Tampa	20.0	22.0	5.0	13.0
Lexington, Ky.	19.0	20 0	5.0	14.5
Covington	20 0	22.0	5.0	14.5
Louisville	18.0	20.0	5.0	13.0
Ashland	18.0	20 0	5 0	15 0
Catlettsburg	18 0	20.0	5.0	15 0

In addition to the state tax of 4 cents on gasoline, Montgomery has city tax of 1 cent on gasoline and one-half on kerosene. Kerosene prices in Georgia include 1-cent tax. In Florida, an inspection fee of 0.125 cent; in Alabama, an inspection fee of one-half cent on kerosene and one-fourth cent on gasoline. To Pensacola, Birmingham and Mobile state taxes add 1-cent levy tax. To Gulfport state tax add privilege tax of 2 cents.

Effective April 2, price to dealers 2 cents under posted tank wagon price.

TANK WAGON CHANGES

Continental Oil Co. reduced the gasoline tank wagon and station prices 2 cents in Albuquerque, New Mex., to 16 cents and 20 cents August 9. On the same date the dealer discount on gasoline was established at 5½ cents in Butte, Mont., where conditions are abnormal. The station price on gasoline was then reduced in Butte, Mont., to 22 cents and made effective August 1, the tank wagon remaining unchanged at 24½ cents.

Continental Oil Co. established a gasoline tank wagon price of 14 cents at Albuquerque, N. Mex., and station price at 18 cents, August 14.

Standard Oil Co. of New Jersey advanced the gasoline tank wagon and station prices 2 cents at Richmond, Va., to 18.7 cents and 20.7 cents August 12.

Standard Oil Co. of Kentucky reduced the kerosene price 1 cent in Macon, Ga., to 13 cents, August 4. The gasoline tank wagon price was reduced 1 cent in Covington, Ky., to 20 cents, August 9. The gasoline tank wagon and station prices were reduced 1 cent in Ashland, Ky., to 18 cents and 20 cents August 6. On the same date the gasoline tank wagon and station prices were reduced 1 cent in Catlettsburg, Ky., to 18 cents and 20 cents.

OKLA. P. L. STATEMENT

The Oklahoma Pipe Line Co.'s statement for July reports crude oil receipts 3,202,017.69 bbls.; daily average 103,290.89 bbls.; shipments 3,336,757.01 bbls.; daily average 107,637.32 bbls.; stocks August 1, 3,101,774.11 bbls.

CRUDE OIL PRICES

(Continued from Page 141)

ROCKY MOUNTAIN STATES

Ohio Oil Co.-Midwest Refining Co.
(Effective April 11, 1930)

Iles (Feb. 15, 1930)	$ .87
33 gravity and above	$ .87
Under 33 gravity	.65
Dutton Creek (Feb. 15, 1930)	1.35
Rock Creek, Wyo.	1.35
Salt Creek	See gravity table
Big Muddy	1.30
Grass Creek, heavy (July 27, 1928)	.90
Grass Creek, light	1.55
Mule Creek (May 21, 1929)	1.20
Elk Basin	1.55
Lance Creek	1.62
Poison Spider (March 14, 1927)	1.00
Notches (March 14, 1927)	.65
Rex Lake (February 22)	1.10
Osage	1.62
Lost Soldier (contract, May 22)	1.00
Hamilton Dome (March 14, 1927)	.85
Greybull (April 11, 1930)	1.55
Four Bear (May 31, 1929)	.85
Cat Creek	1.55
Pondera (Montana) (April 10, 1930)	1.55
Sunburst (Montana) (Feb. 15, 1930)	1.05
Hogback (Feb. 15, 1930)	1.40
Artesia (New Mexico)	1.05
Lea County	See gravity table

Note—Salt Creek, Osage, Cat Creek, Greybull and Hogback posted by Midwest Refining Co., and the remainder by the Ohio Oil Co. Both companies posted Grass Creek light and Elk Basin.

SOUTH CENTRAL AND SOUTHWEST TEXAS

Darst Creek (April 10, 1930)*	$1.15
Luling (April 10, 1930)	.85
Mirando (April 10, 1930)†	.85
Pettus (April 10, 1930)‖	1.40
Salt Flat (April 10, 1930)‖	1.15
Thrall‡	...
Lytton Springs (Lockhart)	See gravity table
Somerset (April 10, 1930):	
Below 33 gravity	$1.15
33 to 33.9 gravity	1.17
34 to 34.9 gravity	1.19
35 to 35.9 gravity	1.21
36 to 36.9 gravity	1.23
37 to 37.9 gravity	1.25
38 gravity and above	1.27

*Posted by Humble Oil & Refining Co. and Magnolia Petroleum Co. †Magnolia Petroleum Co., Humble Oil & Refining Co., Crown Central Pipe Line Co. ‡Thrall prices same as North Central Texas less 19½ cents per cwt. freight. ‖Humble Oil & Refining Co.

EASTERN STATES

Joseph Seep Purchasing Agency
(Effective July 11, 1930)

Seep Purchasing Agency withdrew from Bradford and Allegany Fields as a purchaser on May 16.

Penna Grade Oil in National Transit Lines (Pennsylvania)	$2.05
Penna Grade Oil in Southwest Pennsylvania Lines (Pennsylvania)	2.00
Penna Grade Oil in Eureka Pipe Line Lines (West Virginia)	1.90
Penna Grade Oil in Buckeye Pipe Line Lines (Ohio)	1.75
Corning 25-cent Grade Oil in Buckeye Pipe Line Co.'s Lines (May 2, 1930)	1.75
Somerset Oil in Eureka Pipe Line Lines (Kentucky) (April 11, 1930)	1.31
Somerset Oil in Cumberland Pipe Line Lines (Kentucky) (April 11, 1930)	1.47
Ragland Grade Oil in Cumberland Pipe Line Lines (Kentucky) (Jan. 29)	.60
Wayne District Oil in Cumberland Pipe Lines (April 11, 1930)	1.34

Tide Water Pipe Co.

Bradford district (July 11)	$2.10
Allegany district (July 11)	2.10

Pure Oil Co.

Cabin Creek, W. Va. (July 11)	$2.15
Kelly Creek, W. Va. (July 11)	2.00
Bradford Hollow (July 11)	2.00

MIDDLE WESTERN STATES

Ohio Oil Co.
(Effective April 11, 1930)

Lima (June 26, 1930)	$1.55
Wooster (June 26, 1930)	1.70
Illinois	1.65
Indiana (June 26, 1930)	1.23
Princeton	1.65
Plymouth	1.23
Western Kentucky	1.55
Midland, Mich.* (July 19)	1.45
Dundee, Mich. (April 16)‖	...
	Same as Mid-Continent gravity scale
Upper and Lower Traverse sands, Mich. (April 16)‖	...
	Same as Mid-Continent gravity scale
Saginaw, Mich. (April 11)†	...
	Same as Mid-Continent gravity scale
Cumberland, Clay, Barren, Clinton and Monroe Counties, Kentucky (March 15)‡	1.50
Oil City, Ky. (July 25, 1930)‖	1.35
Oil Springs (Canada) (June 28, 1930)¶	2.03
Petrolia (Canada) (June 23, 1930)¶	1.95

*Posted by Pure Oil Co. †Posted by Sun Oil Co. ‡Posted by Paragon Development Co. ‖Posted by Stoll Oil Refining Co. ¶Posted by Imperial Oil Co., Ltd. ‖Posted by Standard of Indiana for boat shipment. Local refiners posted Mid-Continent prices on April 11.

MEXICAN CRUDE

Panuco*	$0.80

*F.o.b. ship, based on July transactions.

SINCLAIR THREE-GAS SERVICE

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SINCLAIR REFINING COMPANY, INC., 45 Nassau St., New York—*Atlanta, Chicago, Houston, Kansas City*

Sinclair Company's Financial Plans

Chairman Issues Letter to Stockholders Detailing Policy. Ohio Oil and Transcontinental Stockholders Ratify Merger

By A. E. Mockler
New York Bureau, The Oil and Gas Journal

NEW YORK, Aug. 18.—Reports that Sinclair Consolidated Oil Corp.'s expansion plans contemplated the bringing together of oil properties into a unit sufficiently large to challenge the supremacy of any other world oil company received impetus here with the action of the board of directors of the Sinclair corporation in authorizing a new 5,000,000-share issue of preference stock, designed to yield the corporation $500,000,000 in cash or its equivalent. The proposed issue, which will be voted upon at a special meeting of stockholders to be held September 17, is believed to be, with one exception, the largest in corporate history, being exceeded only by the issue by United States Steel Corp. more than 25 years ago of initial capitalization of 5,500,000 shares each of common and preference stocks.

While the plans of the Sinclair corporation do not contemplate the issuance of the new preference stock for public subscription, it is reported they will be used for the acquisition of other oil companies and other phases of the Sinclair plan for domestic and foreign expansion.

Coincident with the calling of the special stockholders' meeting to vote on the new issue and the proposed sale of the Sinclair half interest in Sinclair Crude Oil Purchasing Co. and Sinclair Pipe Line Co. to Standard Oil Co. (Indiana), a statement relative to the company's plans for simplification of its capital setup was issued over the signature of Harry F. Sinclair, chairman of the board, who has sailed for Europe. Mr. Sinclair's statement pointed out that it is proposed to amend the company's charter to cancel the authority to issue any further amount of the 8 per cent preferred, of which there is now $14,129,400 outstanding of $100,000,000 authorized. In this connection, Mr. Sinclair stated that the proposed new 5,000,000 preference share issue would "be a junior stock only so long as the present 8 per cent preferred is outstanding" and that the latter must be regarded as "an excessive dividend obligation in view of the existing credit of the company and existing money rates." This, it is believed, forecasts early retirement of the old 8 per cent preferred stock, either through exchange of the new preference shares or through cash redemption.

Letter to Stockholders

The letter to stockholders, outlining plans for the new preference stock issue, follows:

"A special meeting of the stockholders of Sinclair Consolidated Oil Corp. has been called for September 17 to pass upon the sale of Sinclair's half interest in the Sinclair Pipe Line Co. and Sinclair Crude Oil Purchasing Co. to the Standard Oil Co. (Indiana) for a cash consideration of $72,500,000; also to act upon a proposal, approved by the board of directors, to authorize the issue of a new preference stock.

"In a letter accompanying the call for the meeting H. F. Sinclair, chairman of the Consolidated board, says:

" 'The Sinclair Consolidated Oil Corp.'s one-half interest in the Crude Oil Purchasing Co. represents an investment of $30,000,000, and the corporation's one-half interest in the pipe line company represents an investment of $14,188,000, a total of $44,188,000.

" 'There is outstanding in the hands of the public $53,000,000 bonded indebtedness on these two properties. Your company will be for all practical purposes relieved of responsibility for payment of these bonds. The purchaser has agreed to indemnify us against our liability as guarantor of one-half of the outstanding bonds of the Sinclair Crude Oil Purchasing Co., approximately $40,000,000. Furthermore, the sale of our interest in the Crude Oil Purchasing Co. avoids any possible loss to us on its crude oil inventory of approximately 36,000,000 bbls.

" 'In approving this transaction your directors and officials have had in mind other considerations than those just set forth. Conditions with respect to the position of your company have radically changed since the partnership with the Standard Oil Co. (Indiana) was established. We have plans which cannot be carried out so long as this partnership exists. The sale of our joint interest in the Sinclair Crude Oil Purchasing Co. and the Sinclair Pipe Line Co. leaves us free to develop independently plans of expansion in accordance with our own individual interests.'

"Referring to the second proposal, to change the corporation's capital structure with respect to preferred stock, Mr. Sinclair says:

" 'The present 8 per cent preferred stock of the corporation pays what must be regarded as an excessive dividend in view of the credit of the company and existing money rates, and carries with it other onerous provisions. The authorized amount of this issue is $100,000,000, of which approximately $14,129,400 is outstanding in the hands of the public.

" 'The issuance of any additional amount of the present preferred stock being unwise from the viewpoint of the interests of the corporation and its stockholders, it is proposed to amend the charter so as to cancel the authority to issue any further amount of the present 8 per cent preferred; and to authorize the issuance of preference stock of no par value, which would be a junior stock only so long as any of the present 8 per cent preferred is outstanding.

" 'The preference stock may be issued in series as required, and under such terms as to dividend rate, sinking fund, voting power, convertibility, callable features and other provisions as the board of directors may, from time to time, consider desirable and practicable. It could be issued at $100, $50, or such other unit of value as the board determined.

" 'The total amount of the new preference stock which it is proposed to authorize is 5,000,000 shares. The purposes in view are the use of these shares in carrying out our expansion plans, for the acquisition of properties, in effecting consolidations and mergers, for the refunding of bond issues, the retirement of the outstanding 8 per cent preferred stock for cash, or for other corporate purposes. There is no intention to issue at the present time the newly authorized shares, but rather to provide for the company's requirements from time to time.

" 'These proposals, unanimously approved by your board, are recommended as manifestly in the interest of the corporation and its stockholders.' "

According to reports in financial circles, Bancamerica-Blair, which controls Petroleum Corporation of America and also does the banking for Sinclair Consolidated Oil Corp. and Prairie Oil & Gas Co., is taking a major part in the expan-

(Continued on Page 148)

INDEPENDENT OILS ON NEW YORK CURB

Quotations compiled by Francis, Bro. & Co., Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

1930 High	1930 Low	Week ended August 13 Sales	Week ended August 13 High	Week ended August 13 Low	Week ended August 13 Close	Stocks—		Outstanding capital	Par value	Div. rate	Last paid	1927 High	1927 Low	1928 High	1928 Low	1929 High	1929 Low
⅞	⅛	10,400	1/16	⅛	1/16	American Consolidated Oilfields		$11,018,000	$5	.....	.....	2 1/16	.55	1½	.53	72c	⅛
4½	1½	2,100	2⅛	2	2	American Maracaibo	(sh)	700,000	N.P.	.....	.....	7½	2¾	9½	3⅛	8⅝	1⅛
1⅜	1	200	1⅛	1⅛	1⅛	Argo Oil	(sh)	683,971	$10	.....	.....	2¾	1	4½	2¼	5	1½
21	17	100	17	17	17	British American (new, C.W.I.)		1,311,321	N.P.	25cQ*	1- 2-30	40	20½	55	32¾	62	7⅛
2¾	¾	1,400	1⅛	1⅛	1⅛	Caribbean Syndicate (new)		$131,250	25c	.....	.....	28¼	15½	4½	3⅞	4⅞	1
44¼	24⅛	27,900	27	26⅛	27	Cities Service	(sh)	24,290,359	N.P.	30cA†	1- 2-30	58¾	40¼	90⅞	54	68⅛	20
93⅞	88	300	90	89⅞	90	Cities Service pfd.	(sh)	1,500,000	N.P.	50cM	1- 2-30	95⅜	87	103½	94½	98¾	84
¾	¼	100	1/16	1/16	1/16	Colombia Syndicate		$2,000,000	$1	.....	.....	3⅞	1⅛	3¼	.76	2	½
5⅞	3½	200	3½	3½	3½	Consolidated Royalty		$5,000,000	$10	15cQ	10-25-29	9¾	6⅜	8⅞	6¼	11⅛	2½
7⅝	5½	2,400	6⅛	6	6	Creole Petroleum E	(sh)	5,977,873	N.P.	.....	.....	14⅞	9½	17½	9½	11¾	5⅝
1	¼	100	⅜	⅜	⅜	Crown Central	(sh)	587,000	N.P.	.....	.....	3	.50	3¼	.76	2½	¼
21¾	11½	600	11½	11½	11½	Darby Petroleum	(sh)	1,019,392	N.P.	25cvQ	1-15-30	12	4	33½	3¼	26	6½
11	4½	300	6½	6½	6½	Derby Oil & Refining	(sh)	500,000	N.P.	.....	.....	2½	74	2¼	1	11	2
60	30	50	42	42	42	Derby Oil & Refining pfd.		48,500	N.P.	.....	.....	16¾	4	21⅛	7½	44	20⅜
166⅞	115⅛	1,400	117½	115⅛	117½	Gulf Oil Corp.	(sh)	4,504,921	$25	37½Q	1- 1-30	118	86¼	165	101⅛	209	115
1¾	¾	1,000	¾	¾	¾	Intercontinental Petroleum		$5,682,000	$5	.....	.....	2½	.80	3⅜	1	2⅞	⅜
3	1⅝	200	1¾	1¾	1¾	Kirby Petroleum	(sh)	750,000	N.P.	.....	.....	2¼	1⅛	3	1¼	3⅝	1¼
4¾	1½	300	1½	1¼	1½	Leonard Oil & Development		$50,000,000	$25	.....	.....	10⅞	5⅛	9⅜	5⅛	6½	1
29	18⅝	100	19	19	19	Lion Oil & Refining	(sh)	250,000	N.P.	50cQ	1-31-30	27½	20	43⅞	20	38⅞	18
55⅞	34⅛	700	36¾	35⅛	36¾	Lone Star Gas	(sh)	5,000,000	N.P.	20cQ	12-31-29	59⅜	37	69⅛	48½	67⅞	28
½	⅛	600	¼	¼	¼	Magdalena Syndicate	(sh)	850,000	$1	.....	.....	2⅞	.80	1⅞	.50	1¼	⅛
16	12	100	12½	12½	12½	Margay Oils		160,000	N.P.	50cQ	1-10-30	52	12	48½	32	38½	14
7½	2	200	2½	2½	2½	Mexico-Ohio Oil		.....	...	.....	.....	12⅛	5	8	2¾	6⅜	2½
¾	⅜	100	⅝	⅝	⅝	Mountain & Gulf		$4,000,000	$1	2cQ	1-15-30	1½	1	1¾	.76	1½	⅝
12⅛	8	700	9⅞	9	9⅞	Mountain Producers		$1,682,182	$10	40cQ	1- 2-30	29¼	22¾	28⅞	19½	22⅞	7
3½	2⅜	300	2½	2½	2½	New Bradford Oil		$1,095,291	$5	12½cQ	1-15-30	5⅞	4⅝	5⅝	4¼	5	2½
7¼	3⅛	1,200	3⅝	3½	3½	New Mexico & Arizona		$1,000,000	$1	.....	.....	16	9¼	11⅞	7⅛	9⅜	2¼
11¼	6	200	7½	7½	7½	North Central Texas	(sh)	400,000	N.P.	15cQ	12- 2-29	12¾	9½	14¼	8½	18½	6⅛
2½	½	5,700	1/16	½	½	Pandem	(sh)	489,875	N.P.	.....	.....	9⅜	3¼	6	2⅛	3½	½
4⅜	1¾	300	1¾	1¾	1¾	Pantapec Oil	(sh)	1,506,000	N.P.	.....	.....	12⅛	7	15⅝	8½	10½	1⅞
..	..	No sales.				Pennok Oil		150,000	N.P.	.....	.....	13½	5⅛	7¾	4⅞	7¾	4⅜
10½	8⅛	100	8⅛	8⅛	8⅛	Red Bank Oil	(sh)	250,000	N.P.	.....	.....	24⅜	7	18	4⅞	16	9⅜
5⅜	2⅛	300	2⅞	2¾	2¾	Reiter-Foster	(sh)	388,584	N.P.	10cQ	12- 9-29	15½	3½	12⅞	4⅛	8½	1⅛
8⅝	3⅝	100	4	4	4	Ryan Consolidated	(sh)	500,000	N.P.	.....	.....	7	4½	12	4⅛	11	3
2½	1⅜	100	2	2	2	Salt Creek Consolidated	(sh)	1,286,300	$10	10cQ	1- 2-30	8	5¼	7¼	5½	5⅞	1⅞
15¼	8¼	200	11	11	11	Salt Creek Producers	(sh)	1,496,859	$10	50cQ	2- 1-30	35½	27¼	35	23⅛	25⅞	9
1	½	100	½	½	½	Savoy Oil		$750,000	$5	.....	.....	7	1¼	3½	1	2½	⅛
..	..	No sales.				Transcontinental pfd.		.....	...	.....	.....	..	..	..	..	..	..
4½	2	100	2⅜	2⅜	2⅜	Venezuelan Petroleum	(sh)	755,090	$5	5cQ	11-15-29	7⅜	4¼	9⅛	4¾	6½	1⅜
5	2	200	4	4	4	Woodley Petroleum		$500,000	$1	.....	.....	7	4¾	8¼	4⅞	9½	2
2½	½	300	¾	¾	¾	Y Oil & Gas		100,000	N.P.	.....	.....	6	1¾	8⅜	2⅛	2⅞	¼

*Including one-half per cent monthly in stock. †Payable monthly and a monthly stock dividend of one-half per cent. x Ex-dividend.

STANDARD OIL STOCKS ON NEW YORK CURB

Quotations compiled by Francis, Bro. & Co., Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

1930 High	1930 Low	Week ended August 13 Sales	High	Low	Close	Stocks—		Outstanding capital	Par value	Div. rate	Last paid	1927 High	1927 Low	1928 High	1928 Low	1929 High	1929 Low
18½	12¼	400	18½	18⅜	18½	Anglo-American Oil (vot. C.O.D.)		£4,192,635	£1	.36⅔	11-27-29	21⅝	17⅞	22⅜	14⅞	17	11
1	⅝	200	½	½	½	Atlantic Lobos		.....	...	.....	.....	..	..	..	..	..	..
25	14	50	17	17	17	Borne Scrymser		$1,000,000	$25	$1SA	10-15-29	59	50	56½	44½	46½	25
69	54½	100	54½	54½	54½	Buckeye Pipe Line		$10,000,000	$50	$1Q	12-14-29	60	45	76	53	74¼	55
184⅞	140⅛	100	147	147	147	Chesebrough Mfg.		$3,000,000	$25	$1Q*	12-30-29	126	76½	161	117	210	130
17¾	10	400	10	10	10	Continental Oil (V.T.C.)		$36,057,840	$10	....	12-15-27	22⅝	16¼	23	16	29	10
65¾	30½	100	36	36	36	Cumberland Pipe Line		$1,500,000	$50	$1Q	12-15-29	137	89	114	67	75¾	40
54¾	39	100	39	39	39	Eureka Pipe Line		$5,000,000	$100	$1Q	11- 1-29	68½	47	88	64⅛	70½	42
7	2½	200	4⅛	4⅛	4⅛	Galena Oil Corp.		$16,000,000	$100	....	.....	13½	3½	13	4¼	6½	3
119	78	900	85⅝	85	85	Humble Oil & Refining		$74,103,300	$25	50cQ	1- 1-30	68½	54	114¾	59¼	128	74⅛
320	303	50	315	315	315	Illinois Pipe Line		$20,000,000	$100	$10SA	12-16-29	182	123¾	290½	176½	340½	260
30	18⅛	3,100	19¾	18⅝	18⅝	Imperial Oil of Canada (new)	(sh)	26,421,768	N.P.	12½cQ	12- 2-29	64¾	37¾	104	56¾	41	22
41	31¾	300	32¼	31¾	31¾	Indiana Pipe Line		$3,000,000	$10	50cQ‡	2-15-30	94½	61	91⅞	74⅜	41⅞	26
24	17⅝	4,200	18⅛	17⅞	18	International Petroleum	(sh)	14,247,088	N.P.	12½cQ	12-16-29	29	28¼	55	35	30⅜	15
22⅝	15⅛	100	16½	16½	16½	National Transit		$6,362,500	$12.50	25cQ‡	12-16-29	24	13½	32⅜	19⅜	25⅛	10½
21⅝	10⅛	100	14⅛	14⅛	14⅛	New York Transit (new)		$1,000,000	$10	40cQ†	1-15-30	44½	31¼	75	38½	17½	10
54	35½	50	37	37	37	Northern Pipe Line		$2,000,000	$50	$2SA	1- 2-30	100	70	69	56½	63	41
76⅜	62	700	62¼	62	62⅛	Ohio Oil Co.		.....	...	....	.....	..	..	..	..	..	..
32	17	100	23⅛	23⅛	23⅛	Ohio Oil (new W.I.)		$60,000,000	$25	5cQ‡	12-14-29	67⅞	52	84	58½	79⅞	64⅛
33	13½	200	13½	13½	13½	Penn Mex Fuel		$10,000,000	$25	50cQ	12-14-29	39	12	84	28	44½	20
20⅞	13	100	18¼	18	18	Solar Refining		$4,000,000	$25	$1.25SA	12-20-29	..	..	..	..	50	29
45⅛	35	100	35¾	35¾	35¾	Southern Pipe Line		$1,000,000	$10	5cQ	.....	27¼	15½	19	15	22½	13
65	35	100	45¼	45¼	45¼	South Penn Oil (new)		$30,000,000	$25	50cQ	12-30-29	41½	35	71⅞	36¾	60¼	35⅛
59⅞	47⅝	10,100	50¼	49¾	50	Southwest Pennsylvania Pipe Lines		$1,750,000	$50	$1Q	1-10-29	83	55½	102	70	70	60
40½	30⅛	700	31¼	31	31¼	Standard Oil of Indiana		$348,175,069	$25	62½cQ‡	12-16-29	81½	64⅜	95⅞	70⅞	63	45
48⅞	44⅛	400	47⅝	47¼	47¼	Standard Oil of Kentucky		$25,654,516	$10	40cQ	12-16-29	130	111½	179¾	122¼	46⅞	29
108½	76	750	76½	76	76	Standard Oil of Nebraska		$4,649,225	$25	62½cQ‡	12-20-29	49½	40	54⅞	39⅞	50¼	40
10	7	100	7	7	7	Standard Oil of Ohio		$14,000,000	$25	62½cQ	1- 2-30	87½	72	134	71	129	60
97⅞	76¼	1,700	81⅜	80⅝	81¼	Swan-Finch Co.		$861,466	$25	.....	12- 2-29	21	14½	23½	16	18	10
34⅛	30¾	2,000	31¼	30¾	31¼	Vacuum Oil Co.		$126,180,350	$25	$1Q	12-20-29	..	..	111	72	133¾	75

*Plus 50 cents extra. †Plus 10 cents extra. ‡Plus 25 cents extra. x Ex-dividend.

TRANSACTIONS IN OIL SHARES ON NEW YORK STOCK EXCHANGE

Quotations Compiled by Francis, Bro. & Co., Members of the New York Stock Exchange and Associate Members of New York Curb, Kennedy Building, Tulsa, Okla.

1930 High	1930 Low	Week ended August 13 Sales	High	Low	Close	Stocks—		Outstanding capital	Par value	Div. rate	Last paid	1927 High	1927 Low	1928 High	1928 Low	1929 High	1929 Low
31½	18	1,100	24⅛	23½	24⅛	Amerada Corp.	(sh)	922,075	N.P.	50cQ	1-31-30	37⅝	27⅝	43⅞	27½	42⅝	17½
37	15¼	500	17½	16	17½	American Republic Corp.	(sh)	209,180	N.P.	....	3-20-29	82½	35⅛	85	51⅜	64¾	12½
51	32½	10	40	40	40	Associated Oil		$57,260,300	$25	50cQ	12-31-29	50¼	35	53⅜	37½	47¼	34½
51⅜	30⅛	4,400	35⅜	34⅜	35⅜	Atlantic Refining		$66,763,775	$25	25cQ	12-16-29	131⅜	104	66⅜	50	77⅞	36
34	20½	2,000	22⅝	22¼	22⅝	Barnsdall Corp. A		$56,546,600	$25	50cQ	12- 7-29	35½	20¾	54	20	49⅛	20
30½	18⅜	5,100	20¼	19½	20⅛	ContinentVal Oil of Delaware	(sh)	4,741,554	N.P.	....	3-31-27	..	..	..	..	47⅛	18
71⅛	38⅝	2,000	40	38¾	40	General Asphalt	(sh)	413,333	N.P.	50cQ	.....	96¾	65	94⅞	68	94¾	42¼
116⅞	52¼	12,600	74½	70⅛	73⅝	Houston Oil		$24,968,600	$100	.....	.....	175¾	60⅛	167	79	109	26
32	19⅜	800	21	20⅝	21	Independent Oil & Gas	(sh)	1,362,295	N.P.	50cQ	1-31-30	32¾	17⅝	38⅜	21¾	39⅜	17¾
28⅜	8¾	2,200	11¼	10⅝	11	Indian Refining		$12,565,070	$10	.....	5-31-24	12⅛	7⅝	39⅝	9	53	13⅛
29½	21¼	200	28¾	28¾	28¾	Lago Oil & Transport	(sh)	3,992,122	N.P.	.....	5- 1-27	37¾	20½	39⅛	27⅜	38⅜	16½
12	8	400	8½	8½	8½	Louisiana Oil Refining	(sh)	1,190,063	N.P.	.....	.....	18⅛	10	19¾	9⅜	18	7
10⅝	4½	100	4½	4½	4½	Maracaibo Oil	(sh)	330,000	N.P.	.....	.....	22¾	12	25½	12½	18½	5⅛
37	16⅛	10,000	20½	19⅜	19⅜	Mexican Seaboard	(sh)	1,244,383	N.P.	.....	12-15-20	9¼	3	72	4⅝	69⅜	8¼
33	22⅛	800	23½	23⅛	23⅛	Mid-Continent Petroleum	(sh)	1,857,912	N.P.	50cQ	12-15-29	39⅜	25½	44½	25⅛	39⅞	22⅛
2½	⅞	200	2⅛	2⅛	2⅛	Middle States ctfs.		$23,736,130	$10	.....	7- 1-23	3¾	1⅝	7⅜	2⅜	5⅛	¾
64¼	51⅝	200	58	57¾	58	Pan American P. & T.		$50,084,700	$50	.....	10-20-27	65⅞	40⅛	50⅞	38¼	69	40½
67½	50½	1,400	58⅛	57¾	58	Pan American P. & T. "B"		$121,110,650	$50	.....	11-15-24	66⅜	40¼	58⅞	37¾	69¼	40½
..	..	No sales.				Pan American Western "B"		400,000	N.P.	.....	1-30-27	37⅞	16¾	28⅜	15½	18½	13⅝
12¾	4⅛	500	6	5½	5½	Panhandle P. & R.	(sh)	199,370	N.P.	.....	....	18⅞	8	21¾	11½	15¼	3
80	47½	200	70	70	70	Panhandle P. & R. pfd.		$2,564,400	$100	..	7- 2-23	83	54	108	70	76	47½
44¾	29⅛	4,600	31⅜	30½	31⅜	Phillips Petroleum	(sh)	2,593,075	N.P.	50cQ	1- 2-30	60¼	36¼	53⅞	35¼	47	24¼
..	..	No sales.				Phillips Petroleum rts.		.....	...	....	.....	..	..	..	..	..	..
2½	1	300	1	1	1	Pierce Oil Corp.		$29,622,831	$25	.....	.....	1⅛	½	5¼	½	3⅜	1
7⅛	2¼	2,800	5⅛	5	5⅛	Pierce Petroleum	(sh)	2,500,000	N.P.	...	.....	5½	2½	7	3½	5⅞	½
54	35⅛	700	35½	35⅛	35⅛	Prairie Oil & Gas		$60,848,000	$25	50cQ*	12-31-29	55½	45⅝	68	46	65⅝	40½
60	44	600	44⅛	44	44	Prairie Pipe Line		$101,250,000	$25	75cQ†	12-31-29	190	130¾	280	172	65	45
11⅞	6½	200	7¼	7¼	7¼	Producers & Refiners		$37,438,950	$50	.....	9-15-23	33⅞	16¾	29⅞	16	25⅞	4
40	30	60	30	30	30	Producers & Refiners pfd.		$2,845,350	$50	.....	5- 1-25	50	36⅞	49⅝	41	46¾	25½
27¼	19½	1,500	20⅝	20¼	20½	Pure Oil		$75,959,250	$25	37½cQ	12- 2-29	33½	25	31⅝	19	30¾	20
28¼	14¾	1,400	15½	15⅛	15¼	Richfield Oil		$52,410,875	$25	50cQ	11-15-29	28⅝	25⅜	56	23	49⅝	20
25¾	15½	1,200	16	15¾	15¾	Rio Grande Oil	(sh)	1,236,270	N.P.	$2A	7-25-29	..	..	37½	32	42½	15
56½	49⅛	600	51¾	51⅝	51¾	Royal Dutch, N. Y.	(sh)	611,303	$1.873	.....	9-13-29	54½	44¼	64	44⅝	64	43⅛
48⅜	42⅜	60	44½	44½	44½	Shell Transport & Trading Co.		£23,985,000	£1	$1.45	7-23-29	48⅝	40½	47⅞	41⅜	51½	40⅝
25½	18	5,400	18⅜	18	18	Shell Union Oil	(sh)	13,066,497	N.P.	35cQ	12-31-29	31⅜	23⅝	39¼	23¼	31¾	19
37	18	500	20½	20	20⅛	Simms Petroleum		$8,353,620	$10	40cQ	12-14-29	25⅜	14¼	27¼	18⅛	40⅛	15
32	20	18,300	23	21¾	23	Sinclair Consolidated	(sh)	5,500,000	N.P.	50cQ	1-15-30	22⅜	15	46¾	17⅜	45	21
112½	108	1,500	110	109¾	109¾	Sinclair Consolidated pfd.		$16,025,250	$100	$2Q	11-15-29	104½	97	110	102½	111	103
42	28½	800	28¾	28⅝	28⅝	Skelly Oil		$27,441,250	$25	50cQ	12-16-29	37⅜	24½	42⅝	25	40½	28
75	55½	2,400	62¼	61	61⅝	Standard Oil of California	(sh)	12,594,098	N.P.	62½cQ	2-15-30	60¾	50⅜	80	63	81⅞	51½
40	29	1,500	30½	29½	30	Standard Oil of Kansas		$8,000,000	$25	50cQ	12-16-29	20⅞	14⅝	37¾	15	33¾	18
84⅞	58	37,200	68¾	67¼	68½	Standard Oil of New Jersey		$634,999,200	$25	25cQ*	12-16-29	41⅜	35⅛	59⅜	37¾	83	49
40⅜	30	3,400	31⅜	31	31⅜	Standard Oil of New York		$445,223,675	$25	40cQ	12-16-29	34½	29¾	33¼	28¾	48⅛	31⅜
70	50	200	56⅛	55⅝	55⅝	Sun Oil	(sh)	1,416,869	N.P.	25cQ	12-16-29	34⅞	30	77	31½	68⅜	55
9⅜	2	3,100	3	2⅞	2⅞	Superior Oil Corp.	(sh)	776,979	N.P.	.....	12-20-20	..	..	..	..	24	5¾
60½	50⅛	4,900	51⅜	51	51⅛	The Texas Corp.		$246,204,900	$25	75cQ	1- 1-30	58	45	74¾	50	71⅞	50
14½	8¼	1,100	8½	8½	8½	Texas Pacific Coal & Oil Co.		$9,304,890	$10	2½%A‡	12-31-29	18⅞	12	26⅝	12⅛	23⅞	9½
31	19½	200	30¾	28¾	30¾	Tide Water Oil	(sh)	2,191,759	N.P.	20cQ	12-31-29	29⅛	19	41½	19⅝	40	14
94⅞	83	100	90¾	90¾	90¾	Tide Water 5½% pfd.		$19,947,000	$100	$1.25Q	11-15-29	90⅛	85	100⅛	86	97½	85⅛
17¾	10¾	4,000	14¼	13⅝	14¼	Tide Water Associated	(sh)	5,560,424	N.P.	30cS	2-15-30	19⅛	15⅜	25	14¾	23½	10
89¾	78	400	86¼	83¾	83¾	Tide Water Associated pfd.		$73,284,500	....	$1.50Q	2- 2-30	..	..	..	..	90⅞	74⅛
24	16¼	6,400	17½	17⅛	17½	Transcontinental Oil	(sh)	3,742,029	N.P.	....	.....	10⅜	3¾	14¾	7¼	15¼	5⅛
50	37	400	40	40	40	Union Oil of California		$104,342,375	$25	50cQ	11- 9-29	56½	39⅝	58	42⅜	57	42⅛
38½	25¼	400	27	27	27	Union Tank Car	(sh)	1,254,048	$100	$1.25Q	12- 2-29	127½	94	128⅛	110	163¾	121⅞
27	12⅛	5,100	12¾	12⅛	12⅛	Warner-Quinlan	(sh)	632,948	N.P.	50cQ	1- 2-30	34½	24½	44⅞	26	42⅞	15
..	..	No sales.				White Eagle Oil & Refining	(sh)	505,100	N.P.	50cQ	1-20-30	27½	20	38	20⅛	38	25
21	11½	500	16½	16	16	Wilcox Oil & Gas	(sh)	428,907	N.P.	.....	5-10-28	..	..	..	..	29¾	12⅞

*Plus extra dividend of 25 cents. †Plus extra dividend of 50 cents. ‡Payable in stock. x-Ex-dividend.

In comparing highs and lows for the several years in the three tables, it will be necessary to take into consideration cases where there have been splits in the stock.

EAST COAST MARKET SLIGHTLY IMPROVED

(Continued from Page 135)

first during the first six months of 1930, operators in this market are still proceeding cautiously, with practically the entire export trade down to a hand-to-mouth buying policy.

A number of operators who normally "take a position" in the markets in which they operate are unwilling to go either long or short under current market conditions, and it is reported that there is less speculation in refined products locally than has been the case for some years back. The absence of speculative interest, it is declared, is due not only to the disturbed conditions prevailing in the refined products markets, but is attributable also in some measure to the recent drastic declines in the stock market.

Imports

Imports of crude and refined petroleum at the principal United States ports for the week ended August 9 totaled 1,565,000 bbls., a daily average of 223,571 bbls., compared with 2,323,000 bbls., a daily average of 331,857 bbls. for the previous week and a daily average of 288,071 bbls. for the four weeks ended August 9. Details follow:

(Barrels of 42 Gallons)

At Atlantic Coast Ports—	
Baltimore	388,000
Boston	73,000
New York	818,000
Philadelphia	33,000
Others	105,000
Total	1,417,000
Daily average	202,428
At Gulf Coast Ports—	
Galveston district	68,000
New Orleans and Baton Rouge	80,000
Total	148,000
Daily average	21,143
At all United States Ports—	
Total	1,565,000
Daily average	223,571
Daily average four weeks	288,071

Distribution of total imports is as follows:

Crude oil	967,000
Gasoline	293,000
Fuel oil	305,000

GASOLINE ALONE ACTIVE IN THE CHICAGO AREA

(Continued from Page 134)

as some of the distributors are beginning to accept deliveries on their contracts, datings being given to average the due dates of the bills. The contracts are all based on the published figures and are usually at the average of the prices quoted, although some quotations are based on the low and occasionally a fraction below the low, depending very largely on the size of the contract.

Gas Companies Holding Back

The gas companies are still holding back and are not placing their orders for more than actual needs, although some of the companies having cleaned their storage tanks are now ready to talk about filling them, but it takes a lot of talking and considering by the buyer before any orders for storage are placed. But we are getting along into the time of the year, when the companies will need more oil as their output of gas will be larger. The gas companies claim that in spite of the great increase in electric lighting, they have succeeded in increasing the consumption of artificial gas. The bulk of this is used not for light but for heat and power and it is along these lines that the gas makers will build in the future. Gas for lighting is nearly obsolete. Seldom today is a home or apartment building piped for gas except to the cook stove and possibly the hot water heater and the living-room grate. It is all used for heating rather than for light. This has meant some change in the character of the gas manufactured and some of the gas companies have used much less oil than they used to do. The market is steady at former prices with oil available from 2 to 2¼ cents that has the full U.G.I. specifications. Ordinary gas oil straightrun but not up to the requirements of gas makers is selling at 1⅞ cents and some with bad odor at 2¾ cents by refiners, but the demand is not active although there is a steady but limited movement.

Heavy Fuel Oil

The heavy industrial fuel oil market is less strong than it was a week ago, partly because of freer offerings and partly because of the character of the demand. Of course the crop situation is bad in the Central West. Right now a good rainfall over the dry sections would do a lot of good by improving the pasturage and helping with late yields but at the best there will be considerable sections of the Middle West which will be short of the expected yield of corn and similar late crops. This will have some effect on the spending power of the people.

Uncertainty in the minds of manufacturers may slow up the takings of fuel oil by some companies and have a tendency to throw the season back a little so that the full demand for fuel oil, especially for manufacturing, will not come quite as soon as it would in an average season. Simply stated, there will be a large number of families who will have less income as the result of the drought and this must be considered by the mercantile classes and the manufacturers whose orders come from this trade. Possibly sensing this condition, there have been more numerous offers from refiners to sell their fuel oil, and, while they have had some pretty good ideas as to the value of their material, there have been offers made at somewhat lower prices, some of them from Texas where there seems to have been more fuel oil available than has been reported. Some of the central state plants have been offering their fuel oil freely, as the Indian Refining Co. at Lawrenceville, Ill., and the Sun Oil Co. at Toledo. Some of the local plants have had oil to dispose of and their quotations, based on Group 3, are below the prices at which fuel oil can be regularly bought from the group. As yet zero oils are not commanding any premium so that low cold test oils are selling at the same prices as the refinery test oils. The market for an 18-22 fuel oil runs today from 42½ cents to 50 cents, according to quality of the oil. Some material brought around by boat from Toledo, it is stated, and having the specifications of an excellent fuel oil of the 18-22 class is being offered at 45 cents, Group 3 basis. The sellers of this oil have installed bulk storage at East Chicago which they can fill from the water and propose to fill at least a part of this storage with fuel oil from the Old Dutch refinery at Muskegon. One of the smaller local refineries has a problem in its fuel oil. It is a heavy oil from the cracking stills and is full of free carbon and has a high viscosity. It has been offering this fuel oil, stated to be 12-14 gravity, at around 40 cents but might take less if it could find a real customer. Users of this grade of oil are not numerous. The cheapest oil on the fuel oil market right now comes from Texas where it has been bought as low as 40 cents, although several refiners are quoting 50 cents as their price for almost any kind of fuel oil. There are not many inquiries in the market and what there are are for what would be called small quantities a season ago although even a one-car order is received with pleasure, for the recipient hopes that there will be more cars in the near future. This condition is due very largely to the midsummer dullness which is right now intensified by uncertainty regarding the crops.

Lubricating Oils

The sale of lubricating oils is light. Jobbers' orders are for what they need and must have, not for stock. The industrial demand is very light. The various refinery stocks are quiet and the tone of the market is easy and uncertain as to prices. The present nominal quotations for eastern bright stocks are 23 cents and for western 25 cents, but these prices are being shaded and some buyers claim that they can buy western bright stocks at less than 20 cents with eastern selling around 21 cents.

Taking one thing with another, there has been less price cutting among the regular jobbers than might have been expected. In many parts of the territory the difference between the delivered cost of gasoline and the service station price is better than one-half the station price. Jobbers who sell at the station price without rebate or discount are more than doubling their money. Various forces are believed to be working for the stability of the market, including the Code of Trade Practices, and what some believe is even more effectual, the Ethyl Gasoline plan of working for steady price conditions. The price cutters of today are not regular jobbers, many of them, but simply distributors of gasoline at low prices resembling in their purpose, at least, the chain store which distributes and claims to save money for its customers.

ODD DRILLING IN BAYOUS OF LOUISIANA FIELD

(Continued from Page 42)

water route, at a point known as Indian Village. To that place the railroad company has laid a spur from its main line at Plaquemine, 10 miles distant. At Indian Village, a warehouse and boat landing have been provided, at which equipment and supplies can be transferred from railroad to boat for transportation to the field. A good gravel road also connects the warehouse with Plaquemine, which furnishes ready access to Baton Rouge machine shops, which serve operators in the other fields and development projects in that area.

Drilling operations at Bayou Blue are in charge of M. A. Maund, district drilling superintendent, who has been in the employ of the Standard Oil Co. for more than 15 years. M. G. Pitts was made district production foreman at the time the first producer came in. He formerly was district engineer for the same company.

MEXICAN REFINERIES INCREASE OUTPUT

(Continued from Page 40)

The following table shows the principal products of Mexican refineries during the past three years resulting from the refining of native and foreign crudes:

PRINCIPAL PRODUCTS OF MEXICAN REFINERIES, 1927-1929

(In Bbls. of 42 gals. each.)

Product—	1927	1928	1929
Gasoline	3,913,097	3,334,813	3,339,776
Kerosene	1,251,402	1,694,331	1,805,324
Gas oil	2.124.164	1,913,141	3,014,734
Fuel oil	26,874,553	16,622,552	12,467,266
Lubricants	186,140	515,113	585,178
Paraffin, refined	80,260	81,996	84,720
Asphalt	1,872,307	1,540,383	1,977,633
Crude oil—refined—			
Mexican—			
Light	25,078,582	25,706,280	22,668,562
Heavy	8,764,907	1,938,704	1,029,943
Imported	4,758,857	.....	428,500

Stocks of petroleum products held by Mexican oil companies increased 3,070,344 bbls. during 1929, the principal increase being that of nearly two million barrels of light crude held in storage. The following table shows stocks of petroleum products held in Mexico at the beginning and end of 1929:

STOCKS OF PETROLEUM PRODUCTS HELD IN MEXICO

(Figures in bbls. of 42 gals. each)

Products—	Jan. 1, '29	Dec. 31, '29
Crude, light	2,032,827	3,907,034
Crude, heavy	6,917,755	8,097,199
Fuel oil	4,396,842	4,055,993
Gas oil	423,034	702,404
Gasoline, crude	84,468	58,321
Gasoline, refined	306,531	490,570
Kerosene, crude	140,462	77,159
Kerosene, refined	283,006	252,933
Lubricants	211,275	224,717
Parafine, crude	169,987	121,284
Parafine, refined	2,459	969
Asphalt	6,391	231,346
Other distillates	1,913,953	1,739,405
Total stocks	16,888,990	19,959,334

Exports of petroleum products from Mexican ports amounted to 26,603,385 bbls. during 1929, as compared with 33,262,067 bbls. in 1928 and 48,343,549 bbls. in 1927. Shipments from Tampico dropped from 47,052,137 bbls. during 1927 to 22,829,599 bbls. during 1929, while shipments from the Isthmus of Tehuantapec increased from 1,081,056 bbls. in 1927 to 3,379,812 bbls. during 1929. The following table lists exports of petroleum products from Mexican ports during the past three years:

EXPORTS OF PETROLEUM PRODUCTS FROM MEXICAN PORTS, 1927-1929

(Figures in bbls. of 42 gals. each)

Products—	1927	1928	1929
Crude, heavy	26,476,088	17,817,054	15,470,771
Crude, light	158,804	1,164,222	28
Fuel oil	15,259,949	7,898,022	3,783,290
Gas oil	597,059	1,019,974	1,934,735
Gasoline, crude	103,206	466	.....
Gasoline, refined	2,553,388	2,155,495	1,765,871
Kerosene, crude	4,793	9,636	12,232
Kerosene, refined	920,189	1,334,889	1,474,200
Lubricants	327,954	360,316	441,734
Parafine	893	88	.....
Asphalt	1,941,226	1,501,895	1,720,535
Ttl. exports	48,343,549	33,262,067	26,603,385

The destination of heavy crude and fuel oil shipments, constituting the bulk of the Mexican exports of petroleum products, is shown in the following table:

DESTINATION OF MEXICAN HEAVY CRUDE AND FUEL OIL SHIPMENTS, 1929

(Figures in bbls. of 42 gals. each)

Destination—	Heavy crude	Gas and fuel oil
Argentina	138,443	.....
Aruba	.....	958,602
Gahamas	1,468,973	1,423,559
Chile	.....	25,340
Cuba	63,170	401,535
England	391,439	421,170
Germany	931,524	.....
Sweden	44,533	.....
United States	12,353,617	1,426,011
Bunker oil	79,072	1,057,884
Other shipments	.....	2,300
Total shipments	15,470,771	5,718,025

PETROLEUM ACCOUNTANTS HEAR TALK ON MERGERS

LOS ANGELES, Calif., Aug. 16.—Before an attendance of 75 oil industry accountants, R. S. Vaile, professor of economics, University of Minnesota, spoke at the regular monthly luncheon meeting of the Petroleum Accountants Society, on "Merchandise Mergers."

"The general attitude toward big business has been greatly modified during the past two or three decades," he said. "This difference in attitude may be explained in part by the movement of population from rural communities to large cities, with the accompanying necessity of working together in a nice division of labor. Along with this development of city living there has grown up a technique of government regulation which has done much to reduce the prejudice against large operations, and in fact to reduce the evils which at one time accompanied consolidations and mergers.

"Among the social implications of the newer mergers and changed attitude towards them, is the increase in efficiency with the resultant reduction in cost and increase in production which has accompanied the movements. Actually this results in a form of socialism replacing the older and hard-worn order of individualsim. This change would seem to be the natural outgrowth of a minute division of labor in connection with which all goods are produced for a market, and most goods pass through many hands during their production.

"A further natural result of this situation is the integration of the various steps in production under a single corporate management. This movement seems certain to continue and increase during the next few years, with the probable result of still further increases in physical productivity and the further disappearance of the small independent operator in merchandising lines, and possibly even in farming as well as in manufacturing. This may result in turn in a greater freedom for the consumption of finished products because of the regularizing and shortening of the working day."

VACUUM PICNIC AT HOUSTON

HOUSTON, Tex., Aug. 18.—Approximately 150 members of the Vacuum Oil Co.'s "family" at Houston and their families enjoyed an all-day picnic at the Houston Yacht Club on Galveston Bay. A golf tournament, baseball games, bridge, dancing, swimming and various other entertainment stunts kept the day busy. The company was host at two big "feeds," which included barbecue. H. M. Sample, scout, was master of ceremonies.

TWENTY MORE LOCATIONS ANNOUNCED IN VAN FIELD BY THE PURE OIL CO.

By L. E. Bredberg
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., Aug. 18.—Last week the Pure Oil Co. announced locations for 20 more wells in the Van Field after activities had been at a standstill for about two weeks due to lack of water for drilling purposes. This week no other locations were announced for the field except one which Hill & Hill of Fort Worth have made in the heart of the field on a strip of land which is 240 feet long, 16 feet wide on the north and 18 feet wide on the south lying between Pure Oil Co.'s No. 1 Gin Lot well and their No. 1 C. H. Cannon, on land belonging to the Maxfield heirs. A drilling permit was granted the operators for drilling the test, and material is now being moved in for a well.

The Humble Oil & Refining Co. is drilling a plug on its No. 1 Ruth Star Blake, 640 feet south of the most southerly SE cor. and 250 feet from the east of a 201.4-acre tract in the John Walling Survey, Van Zandt County. Total depth is 2,375 feet, and the well topped the Woodbine sand at 2,371 feet, as high as the highest producers in the field, consequently a big well is expected of the test. Elevation is 497 feet. The Pecan Gap chalk is missing in this test, but the Austin chalk was topped at 2,264-2,327 feet. It lies about midway between producers in the Unit Plan and the two producers in the Carroll district, which was recently opened by the Humble Oil & Refining Co. on the Mrs. E. E. Carroll 95-acre tract in the John Walling Survey.

Humble's No. 2 Blake, a south offset to its No. 1 Carroll, located 150 feet from the north and west of the SE cor. of the Carroll 98.5-acre tract, but in the Blake 201.4-acre tract, topped the Pecan Gap chalk from 1,598-1,675 feet and is drilling at 1,755 feet. This is a west offset to Pure Oil Co.'s No. 1 McMahon on a 48-acre tract, which topped this chalk at 1,675-1,762 feet. Elevation is 492 feet. It is now reaming to straighten a crooked hole. Total depth is 2,451 feet.

Kolp and others' No. 1 Matthews, in the SE cor. of the west half of the 58.6-acre farm in the Willis H. Bruce Survey, about 2 miles due west of the discovery well of the Van Pool, Van Zandt County, topped the Pecan Gay at 2,085 feet, and logged the bottom of it at 2,190 feet. It is drilling ahead at 2,225 feet. This is an interesting test in this direction from the field proper, and a few more days should give definite details on its possibilities of making a commercial producer, and extending the field to the southwest.

The Sun Oil Co. has just completed five core tests on its block which lies southwest of the Shell Petroleum Corp.'s La Rue block in the eastern part of Henderson County. These core drill locations are as follows: No. 1 on the D. O. Warren farm in the E. Edwards Survey; No. 2 on the R. M. McGuffey 160-acre farm in the W. L. Robbitt Survey; No. 3 on the W. S. Warren farm in the Thomas Hanna Survey; No. 4 on the Athens National Bank Land (Pate) in the J. F. Featherstone Survey, and No. 5 on the D. A. Atwood farm in the W. Warren Survey.

The Gulf Production Co. started core drilling south of Mabank in the same county, and made its first location on the C. F. Dixon 74.8-acre tract in the U. R. Morales Survey. The company is also core drilling in Wood and Rains Counties and has just completed a 1,340-foot test on the Holmes farm in the James Forsythe Survey.

The Shell Petroleum Corp. is core drilling in Leon County, especially around Centerville, and now has a total of 20,000 acres under lease on its Centerville block, considerable acreage having been purchased recently, possibly on core drill information.

The Sun Oil Co. has made a location on a block under which a surface structure extends. Geophysical parties have also worked this block, but found no salt body registered as indicated by the surface geology. The location is on the D. McGehee farm in Block 17, Thomas Quevedo Survey.

Cranfill & Reynolds and The Texas Company are also core drilling in East Texas. They are now putting down a test 1,000 feet west and 250 feet south of the W. W. Linear Survey in Wood County.

EAST CENTRAL TEXAS

Boggy Creek	3,810
Cedar Creek	45
Currie	245
Hill County	35
Mexia	4,195
Minerva	550
Nigger Creek	190
Powell	5,471
Richland	130
Thrall	40
Van	25,369
Wortham	725
Total East Central Texas	40,805
Week ending August 9	30,901
Increase	904

Smith County

McElreath & Suggett's No. 1 J. Gilliam, top Pecan Gap 3,430 feet, base of Pecan Gap 3,608 feet, dry and abandoned, total depth 4,010 feet.

Van Zandt County

Pure Oil Co.'s No. 3 C. H. Cannon, initial production 228 bbls., total depth 2,939 feet. Same company's No. 9 R. L. Wells, initial production 198 bbls., total depth 2,937 feet. Same company's No. 2 R. H. Peters, initial production 100 bbls., total depth 2,944 feet. Same company's No. 5 J. L. Jarman, initial production 193 bbls., total depth 2,960 feet. Shell Petroleum Corp.'s No. 5 I. P. Tunnell, initial production 413 bbls., total depth 2,960 feet. Texas Oil Co.'s No. 2 White, initial production 228 bbls., total depth 2,958 feet.

EAST CENTRAL TEXAS WILDCATS

Week Ending August 18

DELTA COUNTY

C. A. Evert's No. 1 Smith, 300 ft. N and 150 ft. W of 38-ac. tract, 3 miles NE of Cooper in J. U. Ranfro Sur. ..... Drlg. 1,035 ft.

FANNIN COUNTY

North American Pet. Co.'s No. 1 Allen, 700 ft. N and 150 ft. W in N. R. Broadfoot Sur., 9 miles N of Honeygrove ..... Shut down 977 ft.

H. M. Rogers' No. 1 McSwain, 300 ft. S and E of Michael Daly Sur., in Juana Telgando Sur., 1½ miles NE of Lomasco ..... Shut down 1,350 ft.

HENDERSON COUNTY

H. E. Ashburn et al's No. 1 T. E. Barry, center of Barry's 59-acre tract in A. York Sur. ..... Shut down 2,510 ft.

L. G. Bradstreet's No. 1 Julia J. Shaunessy, 2,776 ft. from N and 300 ft. from W of survey or farm, John Isard Sur. ..... Shut down 1,968 ft.

Chapman's No. 1 Cade, 1,662 ft. from N and 3,294 ft. from W of J. B. Dorsey Sur. ..... Shut down 3,199 ft.

Cranfill & Germany's No. 1 Clara C. Stow, 2,203 ft. from N and 471 ft. from S of Guadalupe Acosta Sur. ..... Drlg. 4,040 ft.

George Pace et al's No. 1 Mrs. Sarah Anthony, 273 ft. N and 132 ft. W of SE cor. of S. Anthony 632-ac. tract, Jose W. Battvan Sur. ..... Drlg. 2,047 ft.

Sunray Oil Co.'s No. 1 Davis, 600 ft. S and W of most easterly NE cor. of 164-ac. tract, Eldridge Harris Sur. ..... Drlg. 3,287 ft.

HUNT COUNTY

Branson et al's No. 1 West, 350 ft. N, 350 ft. W of W 60-ac. tract, Jas. Rooces Sur. ..... Shut down 2,910 ft.

KAUFMAN COUNTY

Shaw & Alexander's No. 1 Barrow, 2,360 ft. S and 200 ft. W of R. A. Terrell Sur., 4½ miles N or McCoy ..... Drlg. 1,603 ft.

LAMAR COUNTY

Everett & Allen's No. 1 Guest, 250 ft. S and 2,046 ft. E of 100-ac. tract, L. Roberts Sur. ..... Spudded and shut down.

NAVARRO COUNTY

Killam & Phillips' No. 1 Wilson, 150 ft. S and E of 62½-ac. tract in Wm. Bridges Sur. ..... Drlg. 2,645 ft.

Navarro Oil Co.'s No. 2 Mathews, 3,600 ft. from S and 1,140 ft. from W of Smith Sur., 3 miles E of Dawson ..... Shut down 1,550 ft.

Young et al's No. 1 Farmer, 700 ft. from S and 400 ft. from E of 110-ac. farm in F. Finley Sur. ..... Shut down 980 ft.

RAINS COUNTY

Everett & Morrison's No. 1 Franklin, 640 ft. from S and E of 75-ac. tract in John Christian Sur., 6 miles SE of Emory ..... Spudded and shut down.

Owens & Sloan's No. 1 Hill, 150 ft. out of NW cor. of 150-ac. tract, T. McMahon Sur. ..... Top Woodbine sand 4,508 ft.; drlg. 4,535 ft.

RUSK COUNTY

Clem S. Clark's No. 1 Maude R. McCaffiin, 427 ft. from N, 166 ft. from W of farm, Ellis Blackburn Sur. ..... Building derrick.

Mass et al's No. 1 Mathews, 2,244 ft. from N, 4,356 ft. from E, Dalines Cartinas Sur. ..... Shut down 2,338 ft.

SMITH COUNTY

Owens & Sloan Oil Co.'s No. 1 Starnes, 846 ft. along W lines of John Waller Sur. from NE cor. of J. O. Dillard Sur., and 80 ft. E at right angles to W line of J. Waller Sur. ..... Shut down 1,942 ft.

Winona O. & G. Co.'s No. 1 Freeman, 150 ft. from S, W of 39-ac. tract in A. J. Legrone Sur., 4 miles SE of Winona ..... Shut down 2,730 ft.; top Taylor 2,666 ft.

VAN ZANDT COUNTY

Anderson's No. 1 Sanger, 150 ft. from N and W of Humble Sanger lease in John Walling Sur. ..... Shut down 1,590 ft.

L. R. Barton's No. 1 Wamble, 300 ft. from S and W of 100-ac. tract in Pleasant Young Sur. ..... Derrick.

Broderick & Calvert's No. 1 M. F. Shirley, 150 ft. from W in C of N and S lines of 2.1-ac. strip, John Walling Sur. ..... Derrick.

E. L. Chapman's No. 1 Charles Wolverton, 215 ft. from N, 60 ft. S of NE cor. of Wolverton 10-ac. tract, William James Sur. ..... Coring 3,216 ft.

T. Daniels' No. 1 Fannie Cumbine, 185 ft. S and 175 ft. E of NW cor. 156-ac. tract, John Wright Sur. ..... Shut down 2,275 ft.

Dennis Oil Co.'s No. 1 C. W. Morris, 100 ft. from N and 300 ft. from E lines of Morris 160-ac. tract in C. L. Morris Sur., 5 miles SE of Ben Wheeler ..... T. D. 3,071 ft.; will abandon.

Hartt Oil Co.'s No. 1 Dr. L. M. Cox in A. C. Night Sur., 1,785 ft. N of S line and 524 ft. E of W line. ..... Derrick.

H. Helms et al's No. 1 Bogue, 647 ft. W and 155 ft. S of SE cor. of J. M. Brown 70-ac. in Marshall University Sur., SE of Van ..... Rig up.

B. P. Hervey's No. 1 Foster & Smith, 150 ft. S and 150 ft. W of 104-ac. tract, Margaret Neal Sur. ..... Drlg. 4,111 ft.

Howard & Dooley's No. 1 Elliott 188-ac. tract in W H. Bundy Sur. ..... Derrick.

Humble Oil & Ref. Co.'s No. 1 Ruth S. Blake, 640 ft. S line of most southerly SE cor. and 250 ft. E line of 201.4-ac. tract, John Walling Sur. ..... Drlg. plug; total depth 2,375 ft.

Humble Oil & Refining Co.'s No. 2 Blake, 150 ft. N, 150 ft. W of SE cor. Carroll 98.5-ac. tract, Wm. Daniel Sur. ..... Drlg. 1,755 ft.; top Pecan Gap 1,598 ft.

Humble Oil & Ref. Co.'s No. 1 L. A. Dowdle, 1,027 ft. N of S line and 150 ft. E of W line, William Daniel Sur. .. Location.

Imperator Oil Co.'s No. 1 G. J. Luther, in SW cor. G. J. Luther 32-ac. tract ..... Shut down 2,660 ft.

Imperator Oil Co.'s No. 2 G. W. Carter, 175 ft. from S and 35 ft. from W of G. W. Carter 171-ac. tract, William Daniel Sur. ..... Shut down.

Jenkins et al's No. 1 V. T. Davis, SE cor. of 139.8-ac. tract, Nacogdoches County School Land ..... Set 10-inch casing at 250 ft.

Kolp et al's No. 1 Matthews, 150 ft. S and E of 27-ac. tract off west end of 58.66-ac. tract, Willis H. Bruce Sur. ..... Drlg. 2,215 ft.

Kraft & Kelsey's No. 1 Enas in Vacancy strip on E side of Sam Allen and Wylie Enas farms in J. Prado Sur. .. Rig up and shut down.

Priest et al's No. 1 Blewitt, 175 ft. NW and SW of SE cor. of NW 84-ac. tract, E. Porter Sur. ..... Shut down 3,000 ft., top Pecan Gap 2,796 ft., base Pecan Gap 2,957 ft.

Pure Oil Co.'s No. 1 W. E. Morris, 250 ft. N of S line and 200 ft. E of W line of John Walling Sur. ..... Set surface casing at 318 ft.

Pure Oil Co.'s No. 1 A. D. Clark, 200 ft. S of N line and 150 ft. W of E line Mund Gross Sur. ..... Rigging up.

Pure Oil Co.'s No. 1 H. P. Tunnell, 200 ft. S of N line, 285 ft. W of E line James Pace Sur. ..... Rigging up.

Pure Oil Co.'s No. 1 Humphreys, 225 ft. out of NE cor. of lease, A. McPhail Sur. ..... Derrick.

Pure Oil Co.'s No. 1 R. A. Howell, 825 ft. S of N line, 225 ft. E of W line, Mund Gross Sur. ..... Set casing 308 ft.

Pure Oil Co.'s No. 1 J. D. Miller, 943 ft. E of W line, 735 ft. S of N line, John Walling Sur. ..... Set casing 300 ft.

Pure Oil Co.'s No. 1 A. D. Clark, 672 ft. S of N line and 217 ft. E of W line, A. H. Wiley Sur. ..... Derrick.

Pure Oil Co.'s No. 1 O. L. Swain, 225 ft. W of E line and 200 ft. N of S line, John Walling Sur. ..... Derrick.

Pure Oil Co.'s No. 1 Mrs. J. E. Crumbie, 748 ft. S of N line and 225 ft. E of W line, John Walling Sur. .... Set surface casing 301 ft.

Pure Oil Co.'s No. 1 Mrs. W. A. York, 650 ft. S of N line and 225 ft. E of W line, John Walling Sur. ..... Derrick.

Pure Oil Co.'s No. 1 J. L. Petty, 250 ft. out of SE cor. Nacogdoches County School Land ..... Derrick.

Pure Oil Co.'s No. 1 W. F. Swain, 328 ft. N of S line and 176 ft. W of most westerly E line, Mund Gross Sur. .. Derrick.

Pure Oil Co.'s No. 1 B. E. Crim, 250 ft. S of N line and 200 ft. W of E line, John Walling Sur. ..... Rigging up.

Pure Oil Co.'s No. 1 Davis, 127 ft. from S and 200 ft. from W of 139-ac. tract, Nacogdoches County School Land ..... Derrick completed.

Pure Oil Co.'s No. 1 W. F. Swain, 320 ft. from W line and 250 ft. from N line 48-ac. tract, John Walling Sur. ..... Testing 2,930 ft.

Pure Oil Co.'s No. 1 J. R. Shivers, 225 ft. W of E line, and 200 ft. S of N line of lease, John Walling Sur. .. Coring 2,846 ft.

Pure Oil Co.'s No. 1 M. L. McMahon 48 acres, 150 ft. E of W line, 150 ft. S of N line of lease, John Walling Sur. ..... Straightening crooked hole 2,451 ft.

Pure Oil Co.'s No. 1 Ella York, 640 ft. from S and 250 ft. from W line 39.6-ac. farm, John Walling Sur. .... Drlg. 2,056 ft.

Texas Chief Oil Co.'s No. 1 Foster, 600 ft. E of W line and 600 ft. N of S line of W. P. Foster's 151-ac. tract in F. Montgomery Sur., 7 miles S of Canton.... Shut down 1,520 ft.

Van Zandt Oil & Dev. Co.'s No. 1 Robinson, located NE cor. of L'Barbo Sur., 4 miles E of Grand Saline .... Shut down 4,660 ft.

WOOD COUNTY

Big Indian Oil Co.'s No. 1 R. J. King, 450 ft. W of E line and 150 ft. N of S line of King's 100-ac. tract in Wm. Barnhill Sur. ..... Shut down 4,569 ft.; Woodbine sand 4,569 ft.

Gache & Clark's No. 1 A. C. Pick, 165 ft. S of NE cor. G. C. Reeves 25-ac. tract, Daniel Fuller Sur. .... Rig up.

SINCLAIR COMPANY'S FINANCIAL PLANS

(Continued from Page 144)

sion and consolidation plans of Sinclair Consolidated. This program, it is added, contemplates the formation of an oil corporation that will rival in scope of operations and assets both Standard Oil Co. (New Jersey) and the Royal Dutch-Shell which are now credited as the world's largest petroleum enterprises.

Ohio Oil-Transcontinental

Stockholders of Ohio Oil Co., at a special meeting, ratified terms for acquisition of Transcontinental Oil Co. Stockholders also approved an increase in authorized common stock to 7,000,000 shares no-par value from 2,400,000 shares of $25 par common. The $25 par stock will be exchanged for new stock on basis of 1 share of old for 2 shares of the new. Directors were empowered to sell up to 291,914 shares of new common stock for any consideration "other than money alone."

Ohio Oil Co. has declared initial quarterly dividend of 50 cents on the new no-par stock, payable September 15 to stock of record August 26. This places new stock on $2 annual basis, equivalent to the $4 rate on the old $25 par stock, which has been split two for one.

Transcontinental Oil Co. stockholders by more than 70 per cent approved sale of assets to Ohio Oil Co. in exchange for new Ohio Oil common stock, on the basis of four-sevenths of a share of new Ohio Oil no-par common for each share of Transcontinental. The new Ohio common is a two-for-one split up of the old Ohio Oil $25 par common.

Prairie Pipe Line

The Prairie Pipe Line Co. has declared its regular dividend of 75 cents a share and an extra dividend of 50 cents a share, payable September 30 to stockholders of record August 30.

Columbian Carbon

Columbian Carbon Co. and subsidiaries report for quarter ended June 30, 1930, net income of $783,175 after Federal taxes, depreciation, depletion and minority interests, equivalent to $1.57 a share on 498,505 shares of no-par stock. This compares with $810,005 or $1.62 a share on 498,505 shares in preceding quarter and $1,025,632 or $2.24 a share on 457,344 shares in the June quarter of the previous year.

Net income for six months ended June 30 totaled $1,593,180 after above charges, equal to $3.19 a share on 498,505 shares against $2,085,590 or $4.57 a share on 457,344 shares outstanding in first half of previous year.

United Gas

United Gas Corp. declared initial quarterly dividend of $1.75 on the $7 preferred stock payable September 2, to holders of record August 18. This dividend is also payable, to holders of preferred stock, $7 cumulative dividend, Series A, of United Gas Co., who have not prior to August 18, surrendered their certificates for such stock in exchange for $7 preferred stock of United Gas Corp., but only upon the exchange of their certificates for their United Gas Co. preferred stock for $7 preferred stock of United Gas Corp.

Directors also have ordered that funds be set aside in an amount sufficient to pay this initial quarterly dividend on all $7 preferred stock of United Gas Corp. which United Gas Corp. is obligated to issue upon the surrender of deposit receipts issued by The Bank of American National Association pursuant to the plan and agreement or reorganization dated March 29, 1930, under which United Gas Corp. acquired certain securities.

Illinois Pipe Line

Illinois Pipe Line Co. declared the regular quarterly dividend of $4.50 payable September 15 to stock of record September 1.

Sun Oil

Consolidated statement of Sun Oil Co. and subsidiaries as of June 30, 1930, shows total assets of $91,449,748 comparing with $81,046,733 on June 30, 1929, and surplus of $11,822,036, against $9,337,143. Current assets amounted to $26,430,005 and current liabilities to $10,234,021, comparing with $24,350,065 and $10,262,317, respectively, on June 30, 1929.

United Carbon

United Carbon Co. reports for six months ended June 30, 1930, net profit of $468,229 after depreciation, depletion, contingent reserves and Federal taxes, equivalent, under the participating provisions of the shares to $3.92 a share on 19,694 shares (par $100) of participating preferred stock and 98 cents a share on 397,885 no-par shares of common stock. This compares with $838,791 or $7.42 a share on 53,631 preferred shares and $1.85 a share on 237,661 common shares in the first half of 1929.

For quarter ended June 30, net profit was $204,929 after above charges equal, after regular quarterly dividend requirements on 7 per cent preferred stock, to 43 cents a share on 397,885 common shares. This compares with net profit in preceding quarter of $263,300, equal under the participating provisions, to $2.18 a share on 21,069 preferred shares and 54 cents a share on 397,885 common shares and with net profit of $425,904 in June quarter of 1929, equal to $3.76 a share on 53,631 preferred shares and 94 cents a share on 237,661 common shares then outstanding.

Balance sheet as of June 30, 1930, shows current assets of $5,133,479 and current liabilities $597,922. Current assets included cash and government securities aggregating $1,351,807.

Simms Petroleum

Simms Petroleum Co.'s statements of earnings for the second quarter of 1930 and six months ending June 30, 1930, show that for the second quarter, deficit from operations after all charges amounted to $3,208.31, and deficit for the six mouths period was $40,762.99. In the previous year a net income of $475,098.14 was shown for the second quarter, and for the first six months of 1929 net income totaled $417,746.99. Net quick assets on June 30, 1930, amounted to $5,155,217.68 compared with $4,823,890.33 a year previous. At a meeting of the directors a dividend of 40 cents a share was declared, payable on September 15, 1930, to stockholders of record at the close of business August 20, 1930.

Cumberland Pipe Line

Cumberland Pipe Line Co. declared the regular quarterly dividend of $1, payable September 15 to stock of record August 30.

Prairie Oil & Gas

The Prairie Oil & Gas Co. directors have declared a dividend of 50 cents per share on the issued and outstanding stock of the company. This dividend is payable September 30, 1930, to stockholders of record at close of business August 30.

Shell Union Oil

Shell Union Oil Corp. and subsidiaries report for quarter ended June 30, 1930, profit of $2,874,031 after interest, depreciation, depletion, etc., but before federal taxes. This compares with loss of $3,155,008 in preceding quarter and profit before federal taxes of $8,051,082 in second quarter of 1929. Net loss for six months ended June 30 amounted to $280,977 comparing with profit of $9,509,659 before federal taxes in first half of previous year.

Shell Pipe Line Corp., controlled by Shell Union Oil, reports for quarter ended June 30 profit of $4,062,837 after interest, depreciation, etc., but before federal taxes, comparing with profit of $3,671,181 in preceding quarter and profit of $3,584,069 in June quarter of previous year. Profit for six months ended June 30 amounted to $7,734,018 before federal taxes against $6,689,697 in first half of previous year.

Mid-Continent Petroleum

Mid-Continent Petroleum Corp. and subsidiaries for the second quarter ended June 30 enjoyed a net profit of $1,683,779, after allowing for surrendered and abandoned leaseholds, depreciation, depletion, federal taxes and other expenses, or equal to 91 cents a share on 1,857,912 no par value common shares. For the first quarter the Diamond's profits was 54 cents a share, or $1,013,280, and for the June quarter of 1929, the profit amounted to $3,866,407 after charges. The six months' profit was $2,697,059 after charges, or equal to $1.45 a share. For the same period of 1929 the profit was $5,987,398, but before depreciation, depletion and federal taxes.

Penn-Mex Fuel

Penn-Mex Fuel Co. has declared a dividend of $1, payable August 22 to stock of record August 15. Three months ago a similar payment was made.

Twenty Representative Stocks

The Oil and Gas Journal's weekly average price of 20 representative petroleum stocks listed on the New York Stock Exchange and New York Curb, based on closing quotations for Wednesday, was as follows:

Mar. 19	49.72	June 4	50.94
Mar. 26	51.00	June 11	46.65
Apr. 2	51.55	June 18	41.41
Apr. 9	53.26	June 25	42.37
Apr. 16	52.04	July 2	44.12
Apr. 23	53.39	July 9	44.11
Apr. 30	53.70	July 16	46.43
May 7	50.23	July 23	46.06
May 14	51.67	July 30	44.89
May 21	49.71	Aug. 6	45.24
May 28	50.98	Aug. 13	43.53

ALLOWABLE PRODUCTION FOR HOBBS POOL OPERATORS IS 32,250 BBLS.

HOBBS, N. Mex., Aug. 16.—Pursuant to agreement made and entered into between the operators in the Hobbs Pool and the State of New Mexico, prorating the production for the Hobbs Pool, herein below is statement showing the allowable production of crude oil in barrels by units (by companies) effective 7 a.m., August 16 for period August 16 to 30, 1930 inclusive.

The figures given below are arrived at by using the total units now in production (35) and the total average potential production of the entire field 287,246 bbls. divided (25 per cent on acreage and 75 per cent on potential) into a maximum outlet of 32,250 bbls. on oil for the entire field. Using the above figures the allowance on acreage is 226 bbls. per unit and the potential allowance is .082925 of the average unit potential.

C. G. Staley, Umpire.

	Average unit potential	—Allowable prod. in bbls.— Oil units	Potential production	Ttl. No. bbls.
Amerada Petroleum Corp.:				
No. 1 McKinley, Sec. 30-18s-38e	9,109	226	755	981
No. 2 McKinley, Sec. 30-18s-38e	15,520	226	1,287	1,513
No. 3 McKinley, Sec. 30-18s-38e	14,062	226	1,166	1,392
No. 1 State "A," Sec. 32-18s-38e	19,246	226	1,596	1,822
Empire Gas & Fuel Co.:				
No. 1 Fowler, Sec. 31-18s-38e	11,081	226	919	1,145
Getty Oil Co.:				
No. 1 McKinley, Sec. 30-18s-38e	12,279	226	1,018	1,244
No. 2 McKinley, Sec. 30-18s-38e	20,250	226	1,679	1,905
No. 4 McKinley, Sec. 30-18s-38e	14,062	226	1,166	1,392
Gypsy Oil Co.:				
No. 1 Grimes, Sec. 32-18s-38e	17,625	226	1,462	1,688
Humble Oil & Refining Co.:				
No. 1 Bowers, Sec. 30-18s-38e	6,652	226	552	778
No. 2 Bowers, Sec. 30-18s-38e	8,424	226	698	924
Midwest Refining Co.:				
No. 31 Capps, Sec. 3-19s-38e	1,156	226	96	322
No. 24 Leach, Sec. 15-19s-38e	778	226	65	291
No. 1 State, Sec. 9-19s-38e	572	226	48	274
Nos. 1 and 13 State, Sec. 15-19s-38e	2,198	226	182	408
Nos. 24 and 36 State, Sec. 10-19s-38e	562	226	47	273
No. 13 Terry, Sec. 10-19s-38e	886	226	74	300
No. 13 Byers, Sec. 4-19s-38e	21,249	226	1,761	1,986
No. 26 State, Sec. 4-19s-38e	1,555	226	129	355
No. 3 State, Sec. 4-19s-38e	2,138	226	177	403
Ohio Oil Co.:				
No. 1 State, Sec. 30-18s-38e	9,137	226	758	984
No. 1 State-Northup, Sec. 32-18s-38e	8,364	226	693	919
No. 1 State, Sec. 9-19s-38e	....	...	...	20
No. 2 State-Indept., Sec. 32-18s-38e	5,896	226	489	715
No. 3 State-Indept., Sec. 32-18s-38e	13,413	226	1,112	1,338
Prairie Oil & Gas Co.:				
Nos. 1 and 2 Crump, Sec. 15-19s-38e	2,700	226	224	450
No. 1 Selman, Sec. 15-19s-38e	396	226	33	259
Shell Petroleum Corp.:				
No. 1 McKinley, Sec. 19-18s-38e	10,706	226	888	1,114
Nos. 1 and 2 State "A," Sec. 32-18s-38e	5,408	226	448	674
No. 1 Thorp, Sec. 10-19s-38e	1,074	226	89	315
Texas Pacific Coal & Oil Co.:				
No. 1 State "G," Sec. 24-18s-38e	9,331	226	774	1,000
Tidal Oil Co.:				
No. 1 Grimes, Sec. 29-18s-38e	21,496	226	1,783	2,009
Walker Oil Co.:				
Nos. 1 and 2 Terry, Sec. 10-19s-38e	....	...	...	500
The California Co.:				
No. 1 State, Sec. 29-18s-38e	2,074	226	172	398
The Texas Company:				
No. 1 Selman, Sec. 15-19s-38e	377	226	31	257
No. 1 State "C," Sec. 25-18s-37e	6,389	226	530	756
Sun Oil Co.:				
No. 1 McKinley, Sec. 5-19s38e	11,081	226	919	1,145
Total	287,246	7,910	23,820	32,250

THOMAS B. SLICK, NOTED PRODUCER, PASSES ON

(Continued from Page 48)

months, because in March, 1929, he sold out all his producing properties and a half interest in his undeveloped leases and in the drilling wells on his non-producing leases to the Prairie Oil & Gas Co. for a sum reported to have exceeded $35,000,000, with the intention of retiring temporarily from all business cares in order that he could build up his failing health.

The opening of the Asher Pool in Pottawatomie County, Oklahoma, was sufficient to make Mr. Slick forget all about his plans for recreation and he invested heavily in acreage and drilling operations, following this with a big investment in the Oklahoma City Field in partnership interests, and later his invasion of Texas and Kansas. He kept up his widespread activities until he completely broke down and was obliged to enter Johns Hopkins Hospital where it was hoped that he could be built up into a well man.

Mr. Slick was not a man of strong physique at any time and the crowded life he led demanded so much energy that when he gave up there was no reserve force.

Born in Clarion, Pa.

Thomas B. Slick was born in Clarion, Pa. His father was an oil man and the son absorbed all the knowledge that could be acquired in his boyhood and youth in that old oil region.

At the age of 18 years he went to Robinson, Ill., which was then developing into a field of importance and engaged in leasing oil land for operators in that territory. He was 24 years old when he went to Chanute, Kans., to enter the employ of an oil field supply house. He found he had little liking for this kind of work and resigned to re-enter the leasing business, working for various Kansas operators.

Charles B. Shafer and B. B. Jones, noted oil operators of the time, since retired, engaged him to buy leases in western Creek County, Oklahoma. With a team and a buckboard Slick scoured the western Creek County area for his employers and when C. B. Shaffer opened the Cushing Pool with a 400-bbl. well on the Wheeler farm in Section 31-18-7 in 1912 Slick, then about 28 years of age, got into the leasing business on his

own account. There is a legend abroad that he pre-empted the services of every notary public in the city of Cushing, Payne County, and hired every livery rig in town so that no one else could beat him to the job of leasing undeveloped tracts in the Cushing area. The development and subsequent sale of his Cushing properties brought a fortune of $20,000,000.

Married in Texas

When he had sold out all his holdings and put his affairs in order he made a tour of Europe, at the close of which he again went back into the oil business, this time in Texas, where he operated in the Pioneer Pool in Brown County. It was while he was in Texas that he met Miss Bernice Frates, daughter of Joseph A. Frates, who was then vice president and general manager of the St. Louis & San Francisco Railroad. The young couple were married and made an extensive trip. Upon settling down to married life Mr. Slick became interested in railroads and in his subsequent success as an oil operator he invested in steam railroads and traction lines which were managed by his father-in-law. A railroad from Bristow, Okla., eastward through the then busy Bristow Field and a considerable stock ownership in the Oklahoma Union Railways were among his investments in transportation companies.

Made Sport of Work

But Tom Slick was only a railroad man as a side line. His main interest was always in the search for oil. He made a game of it. He felt a personal interest in every wildcat he drilled and was present to see them drilled in and took the keenest pleasure in the success of any of his many wildcat ventures and experienced the same disappointment in a failure that a sportsman would in losing, or seeing his favorite team or player lose, an athletic event. The money end of the oil business interested him mostly in the sense that with plenty of money he could play at his favorite game of wildcatting on a large scale. He used his own judgment in picking properties. He was a daring plunger and never quibbled over a fair price if he thought the property worth prospecting. Mr. Slick acquired vast acreage in Oklahoma, Kansas, Texas, Louisiana and Mississippi. No individual on earth owned as many thousand acres of leases as he did. Nor was there ever an individual who won and lost as much money in the business as Tom Slick.

He spent millions after his success in the Cushing Field before he again rose to the top. There were periods when Mr. Slick's production amounted to little, but he kept everlastingly trying. He kept himself in the background, never granting interviews, standing off attempts of trade journal and newspaper men to get him to commit himself on any subject, especially the most interesting of all subjects—himself. He minded his own business, but every now and then he burst into the limelight with some sensational discovery or by his nerve in drilling deeper to find what he had in the hidden depths.

Unlike so many other wildcatters who made fortunes and lost them completely, Tom Slick may be said to have never gone broke. He always bobbed up with a success at the critical moment.

In the past few years he has been steadily on the rise in wealth and influence. Following the initiation of the conservation movement in Oklahoma Mr. Slick was an active figure in every movement to stem the tide of overproduction. He was interested in all the areas where curtailment was found necessary and his standing and influence was such that he was listened to with respect in the councils of operators. He became a convert to unitization and advocated the drilling of wells—especially in new pools—on 40-acre locations.

Tom Slick had the nerve to play his hunches. In a new pool, where sand conditions were unknown and salt water was feared making other operators hesitate to try to increase production by deeper drilling, Slick was usually the first to "go on down." He always wanted to know what he had. As a partner of the Comar Oil Co. in the Tonkawa Field he induced his associates to test the levels below the Tonkawa pay and they opened the big Silicious lime production in that area, which brought millions to operators in that field and later to operators in the Garber Field not far distant. Wherever he operated he could be depended on to give the sand, or whatever the pay formation was, a thorough test. He had either rare luck or rare judgment in this, and it brought him large returns.

Mr. Slick made a big killing in the St. Louis Pool in Potawatomie County and his holdings there formed the best of his producing properties at the time of the sale to the Prairie.

The death of Thomas B. Slick, while not unexpected, nevertheless cast a gloom over the Mid-Continent Field. He was a great oil man and a good citizen and the general thought was one of regret that he could not have lived and enjoyed the fruits of the score of years of tremendous work which he spent in the industry.

PETROLEUM DIVISION A.S.M.E. ANNOUNCES PROGRAM FALL MEETING

The petroleum division of the American Society of Mechanical Engineers will hold a series of technical meetings in the auditorium on the grounds of the International Petroleum Exposition, Tulsa, from October 6 to 8 and the program promises to be one of great interest to engineers in the production, transportation and refining divisions of the industry.

The program is in charge of two committees, one headed by William G. Heltzel of Tulsa, chairman of the petroleum division of the A.S.M.E., who has secured papers on transportation and production. The other committee, headed by T. H. Hamilton of New York City has secured papers on refinery problems.

All meetings will be open to the public and the tentative program follows:

Monday, October 6

9:30 A. M.—OPENING SESSION

Greetings from President Charles Piez.

Purpose and Scope of Petroleum Division, by William G. Heltzel, Sinclair Pipe Line Co., Tulsa, Okla.

Service Tests on Carbon Formation in Diesel Engines, by E. H. Hillman, lubrication department, technical division, Standard Oil Co. of Indiana.

Lubrication of Diesel Engine Cylinders and Cylinder Liner Wear in Petroleum Industry, by J. M. McGregor and J. B. Harshman, Sinclair Pipe Line Co., Tulsa, Okla.

Report by Committee on Economic Analysis of Pipe Line Pumping Station Costs, by F. E. Warterfield, Oklahoma Pipe Line Co., Muskogee, Okla.

1:30 P. M.—AFTERNOON SESSION

Some Operating Data for Electrical Motor Driven Reciprocating and Centrifugal Oil Pipe Line Pumps, by W. H. Stueve, Oklahoma Gas & Electric Co., Muskogee, Okla.

The Economic Design of Oil Pipe Line Transportation Systems, by Oscar Wolf, assistant chief engineer, the Texas Pipe Line Co., Houston, Tex.

Tuesday, October 7

9:30 A. M.—MORNING SESSION

Automatic Control in Pipe Line Pumping Stations, by J. B. Ford, Chapman Valve Co.; J. B. McMahon, Tulsa, Okla., and T. D. Williamson, Petroleum Electric Co., Tulsa, Okla.

Observations on Temperatures of Mid-Continent Oil Pipe Lines Through a Period of a Year, by Bert Martin and William G. Heltzel, Sinclair Pipe Line Co., Tulsa, Okla.

Inspection of Automatic Pipe Line Pumping Stations.

1:30 P. M.—AFTERNOON SESSION

Embrittlement of Drilling Lines by Hydrogen Sulphide, by Blaine B. Wescott, engineer of tests, and L. W. Vollmer, Gulf Research Laboratory, Pittsburgh, Pa.

Superheated Steam Experiments, by Weaver Smith, Superheater Co., New York, N. Y.

Report of Committee on Rotary Drilling Equipment.

Report of Committee on Unfired Pressure Vessels for Petroleum Industry.

Gasoline Driven Rotary Equipment for Oil Field Service—Its Design and Operation, by H. W. Page, Page Oil Field Equipment, Oklahoma City, Okla.

Open Flow Measurement of Natural Gas Wells, by Walter Reid, Dallas, Tex.

Wednesday, October 8

9:30 A. M.—MORNING SESSION

Cracking Equipment, by Lyman C. Huff, chief engineer, Universal Oil Products Co., Chicago, Ill.

Construction and Operation of Tube Stills for High Pressures and Temperatures, by John Primrose, Foster-Wheeler Corp., New York, N. Y.

Stabilization and Absorption — Technical and Economic Considerations, by L. S. Gregory, Whealton & Townsend, Tulsa, Okla.

Insulation of Cracking Coil and Tube Still Furnaces, by E. V. Rinehart, Johns-Manville Corp., New York, N. Y.

1:30 P. M.—AFTERNOON SESSION

Improving Combustion Efficiency in Oil Refineries, by Joseph R. Darnell, Hyde Park, Boston, Mass.

The Hot Reciprocating Pumps for Cracking Stills, by F. B. Applegate, Worthington Pump & Machine Co., New York, N. Y.

Cottrell Process for Sulphuric Acid Recovery, by P. E. Landolt, eastern manager, Western Precipitation Co., New York, N. Y.

Metallurgical Test Work Involved in Successful Adaptation of Alloy Steels to Petroleum Industrial Purposes, by R. L. Duff, Standard Oil Development Co., Elizabeth, N. J.

OKLAHOMA REFINERY PRICES MARK TIME

(Continued from Page 36)

at 5½ cents for all grades. The A grade was scarce at that price. Manufacturers realize they probably could have boosted the price above the 5½-cent level a week ago when an unexpected wave of buying developed from local refiners and refiners on the Gulf Coast but by not doing so the market has been placed in a much better position to hold the present level despite periods of decreased demand. At present there is less buying than a week ago, but there is no tendency to shade prices.

Kerosene and Distillates

Kerosene of good quality was being offered in large lots for 3 cents and there was very little buying even at that price. The drought is thought to be responsible for this condition for buying in the farm communities has reached a very low figure. Summer plowing has been necessary in periods of normal rainfall in order to keep down the weeds but this has not been necessary. Similarly, the needs of the farmer have been decreased by lesser crops to be handled.

The distillate market is in a similar position but the future needs for this material are better assured. Jobbers are demanding unusually good material and in a few cases the quality of the distillate supplied is very near kerosene. Jobbers' storage is known to be low but even the present low level of prices does not seem to attract them. However, of the long list of fuel oils, this class of material promises to show the first tendency to recover and some believe, once the buying starts, it will develop at a very rapid rate.

Fuel Oil and Gas Oil

While no price change is shown in the list, the heavier fuels are particularly weak and refiners are not optimistic about the immediate future of that market. A price of 40 cents is generally quoted on the grades below 18 gravity but some fuel is going out between 18 and 20 gravity at this price, indicating the willingness on the part of a few to give a better quality than the classification calls for in order to secure the business.

It is also felt that buyers are playing the Chicago market against the Oklahoma market to beat down prices and until it becomes certain that the program of periodic dumping of large quantities of fuel on the Chicago market ceases, stability of the Oklahoma market can not be expected. Gas oil is moving at a little less than a normal rate but on the other hand, there is no large offering of the material. Refiners have cut their crude runs to the point where their cracking units are taking all of the gas oil manufactured and that material which is offered is being absorbed consistently by artificial gas manufacturers. Another outlet more recently developed for the dark gas oil, or pressure still bottoms, is that of settling the dust where the ordinary heavy road oil can not be handled. This market has been developed for road use in the smaller communities around airplane fields, miniature golf courses, driveways, etc.

Lubricants and Wax

The movement of all grades of lubricants remained slow. Prices were unchanged from those established on August 6 and bright stocks were particularly slow in moving. Consumption has apparently been slackened by the general depression wherein it is thought that many people now run 600 and 700 miles before changing their oil whereas, when money was more free, they adhered strictly to the program of changing every 500 miles. While the Mid-Continent refiners find it necessary to compete with the abnormally low prices quoted by Pennsylvania refiners, the Pennsylvania refiners are in turn complaining of a slow movement also.

Wax is generally quoted at 2 cents with deliveries next month sold at 2⅛ cents and deliveries for October and November at 2¼ cents. The position of the wax market has been improved.

MOTOR TRANSPORTATION PROGRAM IS ANNOUNCED

R. K. Fike, Chairman of the Central Group of Motor Transportation of the American Petroleum Institute announces that the fall meeting of this division will be held September 1, 2 and 3 in Parlor "W" of the Mayo Hotel, Tulsa.

September 1 being Labor Day will be devoted to recreations and a good program including a banquet for the evening has been arranged.

Tuesday and Wednesday will be devoted to the business meetings and J. W. Winchester, general chairman of the Motor Transportation division will deliver an address. D. C. Stroop, secretary for the division, and C. A. Young, director of standardization, will also be present and make a review of their work.

Other speakers will be C. E. Dawson and Mr. Schon of the General Motors, Detroit, Mich.; John Mack of the Dodge-Chrysler Corp., Detroit, Mich.; Art Scaife of the White Truck Co., Cleveland, Ohio; and a representative of the Mack International Truck engineering department.

Some of the business to be concluded at these meetings will be the definite formation of the Production Division Motor Transport Committee; and the election of 1931 chairman and two vice chairmen, one for the marketing and one for the production activities in the central group.

Reports of the various committees appointed at the latest meeting will be received and such new business as should properly come before this body will be taken up so a very active business session is assured.

Mr. Fike requests that members desiring hotel reservations advise him in care of the Mid-Continent Petroleum Corp., Tulsa, and their requests will be taken care of in the best possible manner.

The business meeting will start at 10 a.m. September 2 and Chairman Fike assures everyone attending that they will be in position to learn a lot of interesting things about motor transportation in the petroleum industry.

RUMANIAN OVERPRODUCTION CURBED; ARRANGEMENTS TO BUY FOR EXPORTS

By A. E. Mockler
New York Bureau, The Oil and Gas Journal

NEW YORK, Aug. 18.—Overproduction of Rumanian crude petroleum and refined products, which during the first half of the year seriously threatened the stability of markets in several sections of Europe, has been taken in hand under the guidance of the Royal Dutch-Shell combine and Standard Oil Co. of New Jersey, according to reports from abroad. Not only has a drastic curtailment program been put into effect in Rumania, but the Royal Dutch-Shell and Jersey Standard groups have tentatively concluded arrangements to purchase a considerable part of Rumania's refined products output for export.

Under the terms of the conservation program put forward by the Royal Dutch-Shell and Standard interests, and reported to have been accepted and made effective by the Rumanian oil industry, a definite drilling program has been adopted and production regulated in line with the recommendations of these interests.

Under the terms of the conservation agreement a majority of the Rumanian producers have agreed to the following proposals:

1. Each producer has agreed that his actual crude production henceforth will not in any month exceed the maximum figure allotted to him for the particular month in accordance with Clause 3.

2. By actual production is meant that on which the mining tax is levied. Where several companies are closely associated by share holdings or by other means, these companies (including, if necessary, the company owning the majority holdings or exercising control) will enter this convention with their total production as a single unit, and the company signing this convention for them will then assume the whole responsibility for the group.

Maximum Production

3. The maximum monthly production of each producer will be fixed for each month as follows:

(a). For producers whose potential production taken as a basis for the period in question does not exceed 100 tons a day: 100 tons a day.

(b). For producers whose potential production taken as a basis for the period in question is more than 100 tons a day: 100 tons a day, plus their percentage of the reduced balance of Rumanian potential production, a percentage which will apply to the reduced balance of Rumanian maximum production fixed for the particular month, in accordance with Clause 5.

4. Rumanian maximum production will be fixed in advance for each month and the following by the twenty-fifth of the preceding month at a meeting of producers, who will be guided by:

(a). The quantity of petroleum products supplied for domestic consumption.

(b). The quantity of petroleum products necessary for export.

(c). Excessive stocks of crude and (or) petroleum products at the time.

The quantities referred to in "a" and "b" will be fixed on the basis of the quantities supplies for home consumption and for export during the same calendar month of the previous year, increased or reduced as circumstances dictate. Concerning point "c," each producer or refiner carrying excessive stocks of crude and (or) products will submit to the permanent committee a written report showing exactly: (1) His total stocks; (2) an exact specification of the portion considered excessive. These reports must be submitted not later than the fifteenth of the month prior to the month in which the producer desires the possible disposal of his surplus to be taken into consideration.

5. Immediately the maximum Rumanian production has been fixed for each month, the reducible part of the total will be determined. The reducible part will be the maximum Rumanian production for the particular month, less the irreducible part fixed in accordance with Clause 8.

6. The potential production of Rumania and of each producer which will form the basis for the first period, from July 31 to September 30, 1930, will be the total production of Rumania and the actual production of each producer from April 1 and June 30, 1930. The potential production of Rumania and of each producer which will form the basis for the period of six months, in particular from October 1, 1930, to March 31, 1931, will be the production of Rumania and the actual production of each producer obtained in the course of a specified potentiality test made, in accordance with Clause No. 9, during September, 1930. The potential production of Rumania and of each producer which will form the basis for each subsequent period of six calendar months will be ascertained by a potentiality test made, in accordance with Clause 9, in the month prior to the period.

Allowable Output

7. Based on the potential production during the periods as specified in Clause 6, the percentage of each of the producers (provided for in Clause 3b) relating to the reducible part of Rumanian potential production will be determined for each period as follows:

(a). From producers with a potential production of more than 100 tons a day, 100 tons a day will be taken.

(b). From producers with a potential production not exceeding 100 tons a day, the potential production will be taken.

(c). The total of the above quantities of all producers will represent the irreducible part of the total potential production.

(d). For each producer whose potential production exceeds 100 tons a day, the percentage contributable to the reducible part of the Rumanian potential production will be the percentage of his potential production after deduction of the 100 tons a day, compared with the Rumanian potential production after deduction of the aggregate of the irreducible parts, in accordance with Clauses 7a and 7b.

8. The irreducible part of the total potential production determined in accordance with Clause No. 7 will be calculated on the basis of the average daily production, and multiplied by the number of days of the month during which it is to be applied, will give the irreducible part of Rumanian maximum production for this particular month.

9. The potentiality test referred to in the third paragraph of Clause No. 6 will be made always in the space of 24 hours, prior to which all wells will have been producing freely for several days.

Other clauses in the agreement signed by the majority of the Rumanian producers authorize producers, after notification of allotment, to transfer all or part of their allotted monthly allowance of crude; provision for the imposition of fines for overstepping allotted production for two consecutive months; and a provision prohibiting any producer from drilling a well less than 100 meters from the boundary of land in other ownership, without giving at least 30 days' notice.

The substantial increase in Rumanian production during the first half of 1930 is illustrated by the following tables, showing production of principal companies for 1929, monthly average last year, and production in April of this year.

Following the adoption of the curtailment plan the Rumanian refined products market has shown substantial improvement.

Company—	Production 1929 (tons)	Monthly average 1929 (tons)	Production April, 1930 (tons)	Difference against 1929 av. (tons)
Astra Romana	852,370	71,030	102,070	+31,040
Steaua Romana	791,510	65,960	68,120	+ 2,160
Romano-Americana	426,640	35,550	36,570	+ 1,020
Unirea (Phoenix)	483,010	40,270	44,540	+ 4,270
Creditul Minier	404,510	33,710	59,210	+25,500
Sirius	406,450	33,860	31,450	— 2,410
Concordia	267,970	22,320	11,300	—11,020
I.R.D.P.	196,330	16,360	31,200	+14,840
Colombia	171,490	14,290	31,320	+17,030
Petrol. Romanesc	146,080	12,170	10,110	— 2,060
Sondajul	33,690	2,810	12,500	+ 9,690
Dacio Romano	30,120	2,510	8,150	+ 5,640
Sondrum	69,560	5,800	5,250	— 550
Roumano-Belge	57,850	4,820	5,620	+ 800
Petrolmina	51,580	4,300	3,500	— 800
Starnaphta	44,890	3,740	5,050	+ 1,310
Prahova	49,270	4,110	11,330	+ 7,220
Craiova	49,190	4,100	3,680	— 420
Other producers	312,410	26,050	36,900	+10,850

Late Fields

(Continued from Page 48)

other trace of oil was found in the Mid-Kansas Oil & Gas Co.'s No. 1 Messer, SW cor., Section 32-14-3w, a wildcat north of the pool. The showing was found in a core taken from 6,537-52 feet, and the test was drilling deeper at 6,565 feet.

Mid-Kansas Oil & Gas Co.'s No. 1 Cornwell, SE cor. SW, Section 18-12-1w, north offset to the discovery well in the Nicoma Park district, Oklahoma County, was plugged back from a total depth of 6,970 feet to 6,130-90 feet, and shot with 60 quarts, with nothing showing and was bailing down.

Sinclair Oil & Gas Co.'s No. 5 School Land 67, NW cor. SE, Section 36-11-3w, in the south end of the Oklahoma City Pool, was bailed in and made 1,410 bbls. the first hour. The well is a twin to a 4,479-foot dry hole drilled about 10 years ago by L. E. Trout and abandoned before it reached to the pay horizon.

Skelly Oil Co.'s No. 2 Dillon, C N half NE SW, Section 2-11-3w, in the north end of the field, was bailed down 2,300 feet, and completed through a mud and sand trap, making 315 bbls. the first hour and 4,640 bbls. the first 12 hours. The gas volume was estimated at 20,000,000 feet. The total depth of the well was 6,600 feet.

Indian Territory Illuminating Oil Co.'s No. 3 H. W. Jones, SW cor. SE SW, Section 1-11-3w, was the largest completion of the day. It made 812 bbls. the first hour and 15,885 bbls. the first 18 hours. The gas volume was estimated at 20,000,000 feet from a total depth of 6,446 feet in Simpson sand.

Indian Territory Illuminating Oil Co.'s No. 2 Haubegger, SW cor. NW, Section 14-11-3w, on the west side of the field, made 233 bbls. the first hour and 3,036 bbls. the first 18 hours and 5 minutes. The gas volume was estimated at 10,000,000 feet. The total depth was 6,531 feet in Simpson sand.

Same company's No. 1 Capshaw, SE cor. NW, Section 23-11-3w, extends production a quarter mile north and west on the west side of the pool. The well made 740 bbls. the first 14 hours and 50 minutes. The gas volume was estimated at 2,000,000 feet and the total depth of the well was 6,610 feet in Simpson sand.

Prairie Oil & Gas Co.'s No. 3 Thomas, SE cor. NW NW, Section 23-6-3, in the Wanette Pool, Pottawatomie County, has cratered from 50 to 100 yards of the rig in six or eight places. The gas is estimated at 50,000,000 feet, and it is also making 20,000 bbls. of water. The 8-inch casing was landed at 3,445 feet in shale and the gas is believed to be coming from behind the 8-inch casing.

Oklahoma City Pool had another wild well in the north end of the field near the city limits which endangered nearby residences and business buildings. C. C. Julian Oil & Royalty Co's No. 1 Houser, NE cor. NW Section 14-11-3w, was completed Saturday, August 16, and made 2,781 bbls. the first 21 hours, and was shut in. It was again opened August 17 and made 1,339 bbls. in the next six hours. Tankage on the lease was then full and it was shut in. A leak was discovered by the company's superintendent shortly after the well was shut in, but a blowout came before he could prevent the break. Immediately all highways were blocked and all nearby drilling wells were shut down and families were moved out of the danger zone.

With the assistance of engineers from other major oil companies the well was shut in after it blew wild for 25 hours. Cement was pumped into the hole under high pressure, shutting off the flow at the bottom. The casing will be recemented to prevent another blowout. Approximately 10,000 bbls. of oil has been transported through the Julian company's pipe line to a refinery nearby.

OKLAHOMA GEOLOGICAL SURVEY SUMMER STUDIES

Summer field parties of the Oklahoma Geological Surevy have about completed their projects, according to Dr. Charles N. Gould, director of the survey. One summer party, working in the Arbuckle Mountains, is still in the field making a detailed study of the Simpson formation, which contains the Wilcox oil sand. This party is headed by Dr. C. E. Decker, of the University of Oklahoma.

Prof. J. W. Stovall, who studied and made fossil collections in the Permian red beds of western and southwestern Oklahoma, has completed his field work. Evidence that all of western Oklahoma was not under water at the time when the Permian red beds formations were being deposited is indicated in discoveries made by Professor Stovall, who reported one locality in southwestern Oklahoma where he found indications of former land conditions, near-shore or shallow water all within a short distance.

Prehistoric land is indicated by remains of fossil plants found under conditions indicating they remained where they had grown. Near the plant remains, Professor Stovall found fossils under conditions indicating an old shore line and a short distance farther found remains of sharks and other water animals. By piecing the evidence together Professor Stovall pictured a prehistoric shore line where trees and other plants grew close to the water line but with a narrow beach frequented by various types of animals. Then, out in the comparatively shallow body of water, sharks and other marine animals lived, apparently in considerable numbers.

GULF COAST MARKET

HOUSTON, Tex., August 19.—An almost generally slower tone was evident throughout the Gulf Coast refinery market at the opening of this week. This was most evident in gasolines, which were being offered one-fourth cent under the prevailing market of a week ago. Some sellers continue to hold out for 7¼ cents for motor fuel for domestic movement, but the majority of material is being offered around 7 cents. The lower North Texas market, on which many contracts out of Gulf Coast refineries are based, is responsible largely for the weakening here.

Fuel oils also appear to be considerably weaker in tone. No indication has been given of any actual lowering of quotations, but comparatively little material is moving.

Lubricating oils are holding their own in price with no concessions being reported despite the fact that demand is not active. Sellers are moving some grades fairly well, but not in sufficient volume to indicate a firm market. Gas oil is one product which is indicating no change, due to the fact that the sources of supply are limited and the material generally has its established outlet.

ALMOST ALL OIL AND OIL PRODUCTS USED IN CZECHOSLOVAKIA IMPORTED

By Charles E. Kern
Washington Bureau, The Oil and Gas Journal

WASHINGTON, D. C., Aug. 11.—Practically the entire Czechoslovak supply of petroleum and its products is imported at present, according to a report made public by the Minerals Division, Department of Commerce. While Czechoslovakia is rich in natural resources, its oil regions have never been consistently exploited, and notwithstanding increased drilling in 1928, the domestic petroleum production of 1929 was estimated at only 97,300 bbls., the report shows.

Before the World war crude came principally from the United States and Mexico. In subsequent years, it was brought from Poland and Rumania. In 1925, more than half of the crude was brought from the United States and most of the remainder from Russia. The Russian contribution has increased in recent years and most of it now comes directly. At first a large proportion was imported through Hamburg and Fiume.

The growing Czechoslovak demand for petroleum products is particularly marked in gasoline and lubricants, probably because of the increasing use of motor vehicles and the progress in industrial motorization. Notwitstanding the insignificance of the domestic production, there is an increasing tendency to refine crude oil within the country. There are 11 petroleum refineries in operation in Czechoslovakia and wholesale interests are considering the establishment of another large plant at Melnik. The refineries now operating are distributed throughout the country, but all are near important industrial centers. Three of them account for 67 per cent of the total capacity.

Total Power Available

Total industrial power available within Czechoslovakia includes 1,785,100 horsepower from steam, 300,000 hydraulic, 50,000 from gas, and 20,000 from gasoline and naphtha. Increase in industrial power means larger consumption of transformer oil and lubricants, particularly in the case of electrical installations, the report states.

Lubricating oils are imported to some extent from Poland, Germany, and Russia, but the United States is the principal source of supply, according to the report. Aside from the lubricants, America contributes somewhat to Czechoslovakia's source of crude, gasoline and kerosene imports.

Oil products in Czechoslovakia are generally distributed by trucks belonging to agents of local firms. Gasoline, kerosene, and lubricants are sold under the name of the firm, but the gasoline and kerosene are often actually products of the domestic refinery. Lubricating oils almost invariably are imported.

Prices of all petroleum products are higher in Czechoslovakia than in the United States. Wholesale prices quoted by the Czechoslovak Association of Petroleum Refineries have been furnished the Bureau by Consul General A. C. Frost, Prague. Converted to American measures and currency, they show $6.29 per barrel for crude, $0.225 to $0.255 per gallon for gasoline, $4.83 per barrel for gas oil, and $0.15 to $0.21 per gallon for lubricating oils. Retail prices usually are fixed by agreement among the principal selling companies.

Taxes on Oil Products

Taxes on finished oil products, including import duties and consumption taxes, also quoted by Consul General Frost, are equivalent to $4.17 a barrel on gasoline, $3.10 on kerosene, and $4.20 on lubricants. The refining industry is encouraged by free admission of crude oil and enriched crude, although a special license is required for importation of the latter.

The purchase and use of motor vehicles are likely to continue increasing, the report says, since road making is one of the immediate needs of the country and a government road fund is already in existence for this purpose. The residue from the production of gasoline and kerosene is usually made into road material.

Petroleum products entering Czechoslovakia usually come from Poland by way of Bohumin, from Rumania by Bratislava, and from the United States by Hamburg—all of these places having facilities for reshipment. Foreign gasoline and kerosene are shipped into the country in tank cars, and locally manufactured products usually go in tank cars to distributing points.

Mineral Law Section Of Bar Association Considers Petroleum

By J. B. Waldo

CHICAGO, Aug. 19.—At the meeting of the Mineral Law Section of the American Bar Association which opened here this morning the routine business was passed over quickly so that as much time as possible might be given to the consideration of the various addresses. The first was that of Abram J. Meyers, former member of the Federal Trade Commission, on the relation of Federal antitrust laws to the problems of mineral conservation.

Mr. Meyers reviewed each step in the program of Federal conservation of oil from the appointment of the Federal Oil Board in 1924 by President Coolidge down to the law passed on July 3 of this year authorizing the lessees of Federal oil land under certain conditions to adopt the unit system of operation. He stated that in his opinion this law did not in any way authorize or encourage the lessees of oil lands outside of the government domain to expect the right to operate their lands as a unit, the law being so specifically directed to the owners of oil leases on government lands and so limited and restricted in their cases that no one operating outside lands would receive any benefit from the act as passed.

In the speaker's opinion the best solution yet offered was the suggestion made by the Committee of Nine that under certain conditions of demand and supply when the overproduction was obvious a properly delegated body could act to regulate production until the condition was corrected. He strongly advocated the modification of the Sherman Antitrust Law to fit present conditions in industry. He pointed out that nearly every suggestion for relief had met with great opposition from some part of the industry and that none of the measures at present in force under state authority had done more than to reduce the production of some fields and that the great reserves of oil stored above ground remained really untouched.

Another feature of the meeting will be the address of J. Elmer Thomas, chairman of the Committee on Petroleum Economics appointed by the Federal Oil Board, on the subject of the changing trend in petroleum economics. His address will be followed by the report of the Committee on Conservation of Mineral Resources. The next business will be the report of the nominating committee already appointed and the election of officers.

At the afternoon session subcommittees of the Committee of Nine on the conservation of mineral resources reported by states. The California committee stated the supreme court of the State had the question of the constitutionality of the natural gas conservation law before it and that all were waiting for the decision. Particular attention was given in the report of conditions in the town lot fields. The committee believed much good had resulted from efforts of the State to reduce production of natural gas. The Oklahoma report was brief and to the point. It was admitted that the authority of the statutes had never been seriously questioned but they had worked through the aid of voluntary agreement to the great benefit of the oil industry in that State.

The program of the meeting contained a copy of a law which is to be presented to the Texas legislature at its next session and for which the approval of this session was asked and granted. It proposes simply to strengthen the authority of the State Railroad Commission in two ways and introduces no new principle, being closely like the California law for the regulation of natural gas.

OKLAHOMA PRORATION COMMITTEE FAVORS CONTINUING SCHEDULE

The Oklahoma proration committee of the Mid-Continent Oil and Gas Association, at a meeting on Tuesday, August 19, adopted a resolution providing for the continuance during September of the July and August proration percentages affecting Oklahoma flush and semiflush fields.

This action was taken because a canvass of the crude oil purchasing companies and pipe lines developed the fact that they would not purchase or run more than 550,000 bbls. per day through the month of September and because some of them had made it plain that even the quantity of crude they are willing to accept is more than their actual needs.

The committee's recommendation, which it is hoped will be adopted at the general curtailment meeting to be held Friday in Tulsa, contains a new item providing that all wildcat wells brought onto production in September be limited to 50 bbls. per day production. The Tatums Pool in Township 1s-3w, Carter County, with an accredited potential of 12,000 bbls. per day at the beginning of September, is limited to 2,500 bbls. per day; Chandler Pool in Lincoln County, potential 30,000 bbls., allowable production 2,500 bbls.; West Perry, Noble County potential 1,200 bbls., allowable production 600 bbls.; Orlando, Payne County, potential 850 bbls., allowable production 400 bbls.; Township 20-4w, Logan County, potential 800 bbls., allowable production 400 bbls. Oklahoma City is credited with a ponteitial of 700,000 bbls. and is given an allowable production of 88,903 bbls., which is more than the pipe lines care to handle, but which they will accept.

Franklin Wants Increase

It developed at the meeting that more than ever the Oklahoma City Field is the key to the production and price situation. Wirt Franklin, one of the largest operators in the Oklahoma City Field, wired Harry H. Smith, secretary of the Mid-Continent Oil & Gas Association, that Oklahoma City must be permitted to produce 160,000 bbls. per day or he would go before the State Corporation Commission and oppose the granting of an order by the commission necessary to carry out the proposed September proration schedule. A. V. Hoenig of the Indian Territory Illuminating Oil Co., the largest producer in the Oklahoma City Field, said there was opposition to the present proration percentage in that field and that some producers believed the field should be permitted to produce more oil. He cited the case of C. C. Julian, whose company has two big wells in the field and who is quoted as saying that he never made an agreement to shut in his well. Mr. Hoenig suggested that the old fields of the State, now being permitted to produce to their full capacity of 260,000 bbls. per day, be cut down 25 per cent and that the 60,000 or more barrels thus cut off be allotted to Oklahoma city, which, he said, would satisfy the kickers in the Oklahoma City Field.

Representatives of the oil buyers present said this plan was impossible of operation. There were only a few oil buyers in the Oklahoma City Field and crude oil purchasers like Gypsy, Texas, Mid-Continent, Skelly, Barnsdall and many others with no lines into the Oklahoma City area would have no place to procure oil if they cut their runs 25 per cent in the old fields.

R. L. Young, president of the Carter Oil Co., one of the leading crude oil purchasers in the State, made it plain that if the volume of crude produced greatly exceeded the demand, a price cut was inevitable and he intimated that it was hard enough to maintain the present price schedule even with all operators cooperating to keep production down to 550,000 bbls. He said the whole matter of crude price was up to the operators in Oklahoma City. The situation, he said, was one of their own making. They had overdrilled the field and had overproduced in the face of continued warnings. His company, Mr. Young said, would buy no more oil than it is buying, and as a matter of fact, it would like to cut its runs in the Oklahoma City Field. Representatives of other purchasing companies present, all of them buyers in Oklahoma City, asserted that they were taking their limit of oil from that field.

Oklahoma City operators will meet in that city on Thursday and the situation so far as the oil purchasers is concerned will be laid before them in the strongest terms.

POTENTIAL AND ALLOWED PRODUCTION—STATE OF OKLAHOMA

Proration Schedule, September 1, to October 1, 1930

Field—	Daily Estimated Potential Barrels per day	Daily Allow. Prod. Barrels
Production allowed—50 per cent:		
Allen (Wilcox)	9,000	4,500
Allen (Cromwell)	17,927	8,964
Bowlegs	28,327	14,164
Carr City	10,494	5,247
Earlsboro (old)	28,665	14,332
Earlsboro Townsite	10,000	5,000
Little River	46,528	23,264
East Little River	22,000	11,000
Marshall-Lovell	5,650	2,825
Maud	5,712	2,856
Mission	14,673	7,337
Sasakwa	9,500	4,750
Searight	13,205	6,602
Seminole	28,470	14,235
East Seminole	4,145	2,072
St. Louis	38,972	19,486
Sub-total	293,268	146,634
Production allowed—25 per cent:		
East Earlsboro	40,000	*15,000
South Earlsboro	35,000	8,750
Sub-total	75,000	23,750
Production allowed—18¾ per cent:		
West Asher-Wanette	35,000	6,562
Konowa (adjusted)	68,000	12,750
Sub-total	103,000	19,312
Production allowed—Adjusted maximum:		
Tatums	12,000	2,500
Chandler	30,000	2,500
West Perry	1,200	600
Orlando	850	400
Twp. 20n-R.4w	800	400
Sub-total	44,850	6,400
Oklahoma City	700,000	88,903
Wells in prorated areas not prorated.	5,000	5,000
Total, prorated areas	1,221,118	290,000
Outside areas—not prorated	260,000	260,000
Total State	1,481,118	550,000

*Minimum.

CEMENT CRUDE CUT 25 CENTS

The law of supply and demand is working out in the Cement Pool, in Caddo County, Oklahoma, where the Anderson-Prichard Corp. is the principal crude oil buyer. Development of the deep sands in the Cement Pool has caused an overproduction and the Anderson-Prichard Corp. has reduced the price of all grades of oil produced from the deep sands 25 cents under the posted price prevailing in other parts of Oklahoma. The new price does not affect the upper sand crude in the Cement Pool. Anderson-Prichard Corp. transports cement crude to its Cyril, Okla., refinery.

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C. D. WATSON RETURNS FROM FOREIGN FIELDS

Charles D. Watson, chief engineer, Carter Oil Co., Tulsa, returned August 11 from a trip in the interests of his company that took him around the world.

C. D. Watson

Leaving Tulsa January 25 last, Mr. Watson went first to fields in California and sailed from San Francisco February 6 for Sumatra where he spent some time with officials and engineers for the Standard Oil Co. (New Jersey) interests. He then went to Borneo and visited with oil men there and left there June 12 for Shanghai, China, and from there by steamer to The Hague, Holland.

From The Hague, Mr. Watson returned to New York City and after reporting to the officials of the Standard Oil Co. (New Jersey) came on to Tulsa.

When asked for some comments upon his trip and the engineering features he observed, Mr. Watson stated that because of the international use of American equipment in drilling, production, transportation and refinery operations abroad there was little to state that would be new to the petroleum engineer here. Not only is American equipment used but American engineers and drillers are operating it.

OIL SAND IN BLACK HILLS

Oil sands are reported to have been struck at 1,382 feet in the second well, No. 1 Rockford, of the Black Hills Petroleum Co., 30 miles northwest of Hot Springs, S. Dak., near the Wyoming line. The well is 50 feet deeper than the discovery well, No. 1 Black Hills, and the oil is similar, a high grade black crude. The well is shut down for engine repairs. Officials will start a rig for the third well. It is 12 miles from the Red Canyon Field, which has been purchased from the O'Neil interests by the Morgan Holding Co., Minneapolis. The original Red Canyon well will be put on the pump and bids will be asked for drilling three additional wells.

BUILD TANKAGE IN MEMPHIS

The Standard Oil Co. of Louisiana has applied to the city zoning commission for a change in the present zoning at Riverside and Wisconsin Avenues in Memphis, Tenn., to enable it to build three storage tanks at a cost of $100,000.

MAGNOLIA P. L. STATEMENT

Magnolia Pipe Line Co.'s July figures on runs, shipments and stocks of Kansas and Oklahoma crude oil were as follows: Runs, 1,615,546 bbls.; daily average, 52,114 bbls.; shipments, 1,940,105 bbls., daily average 62,584 bbls.; stocks, 6,549,846 bbls.

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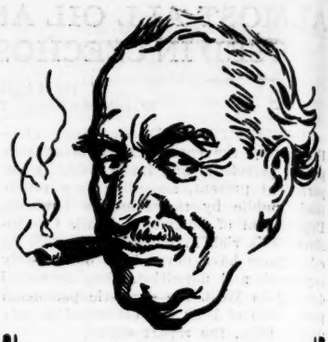

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Eight companies, operating twelve air lines, are located in Fort Worth and the all-essential problem of speedy transportation is solved.

The recent absorption of the Pierce Petroleum Corporation by the Sinclair Consolidated Oil Corporation made necessary the establishment of a Southwestern District Sales Office, so located as best to accommodate the speedy and effective transaction of business. Sinclair unhesitatingly chose FORT WORTH and within the next few weeks approximately 450 employes of the Pierce and Sinclair companies will be added to the already large Sinclair staff in the Panther City.

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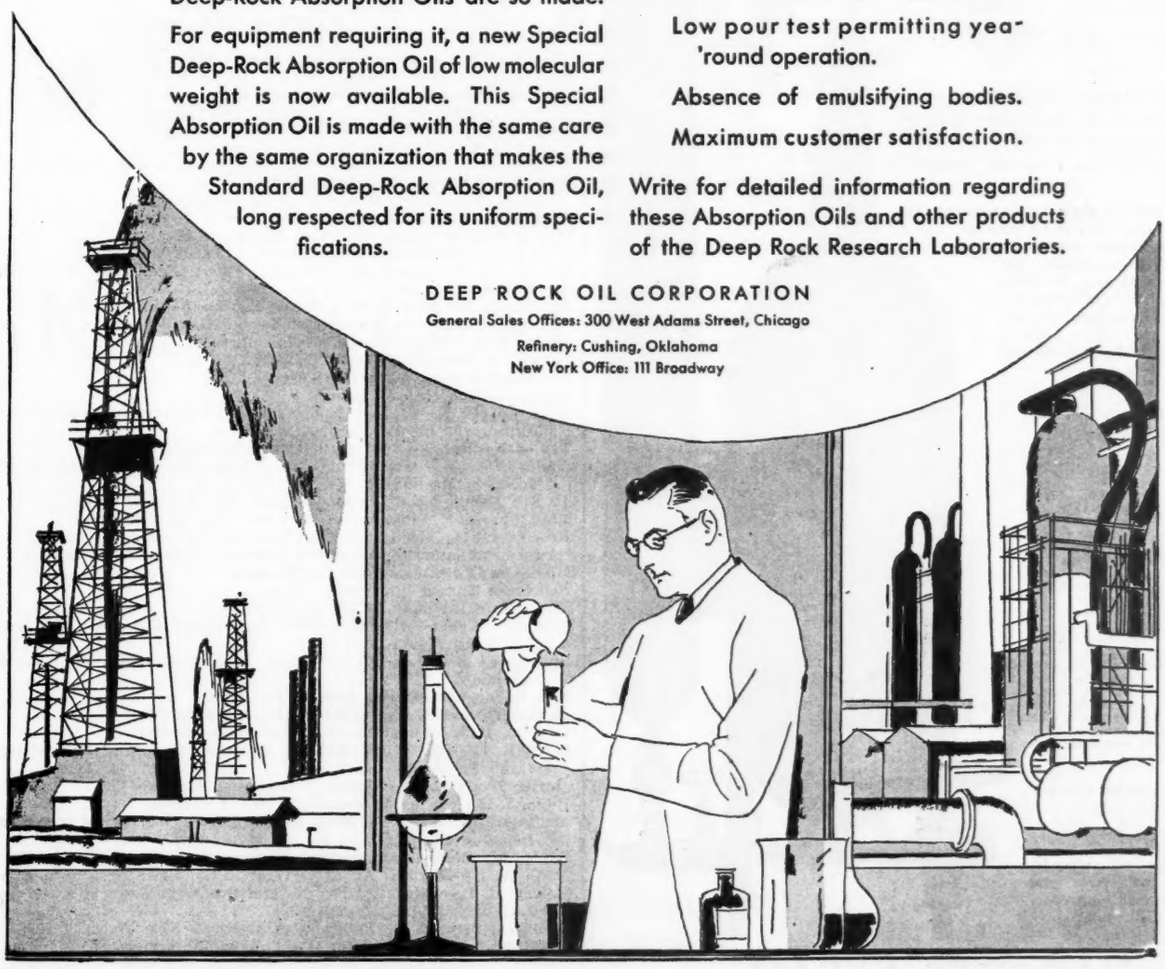

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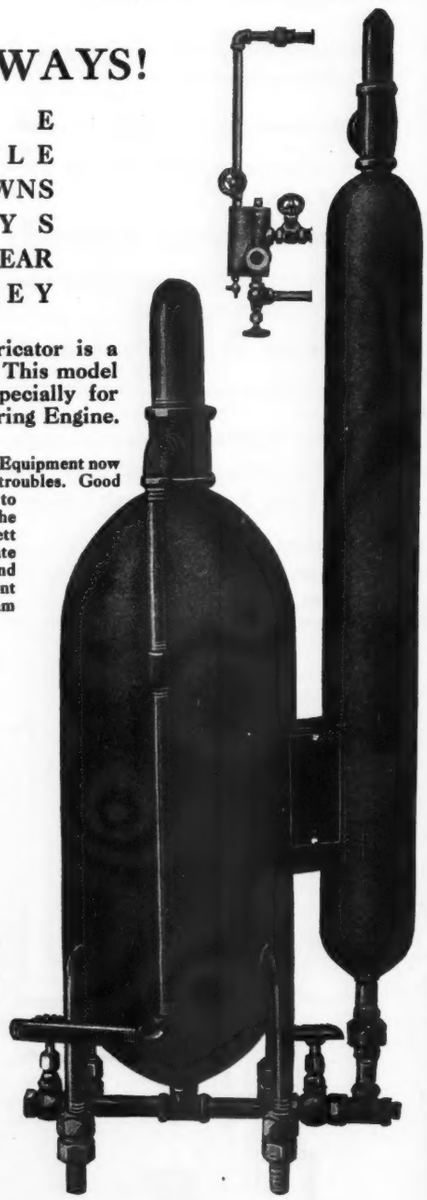

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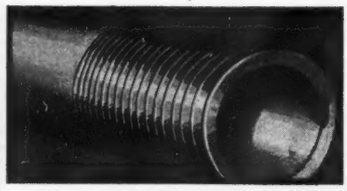

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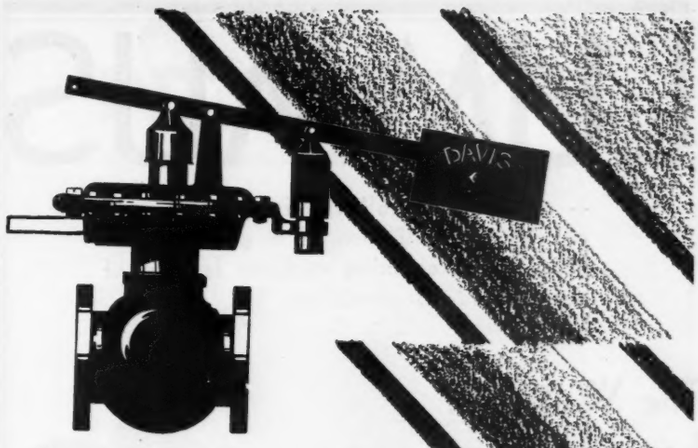

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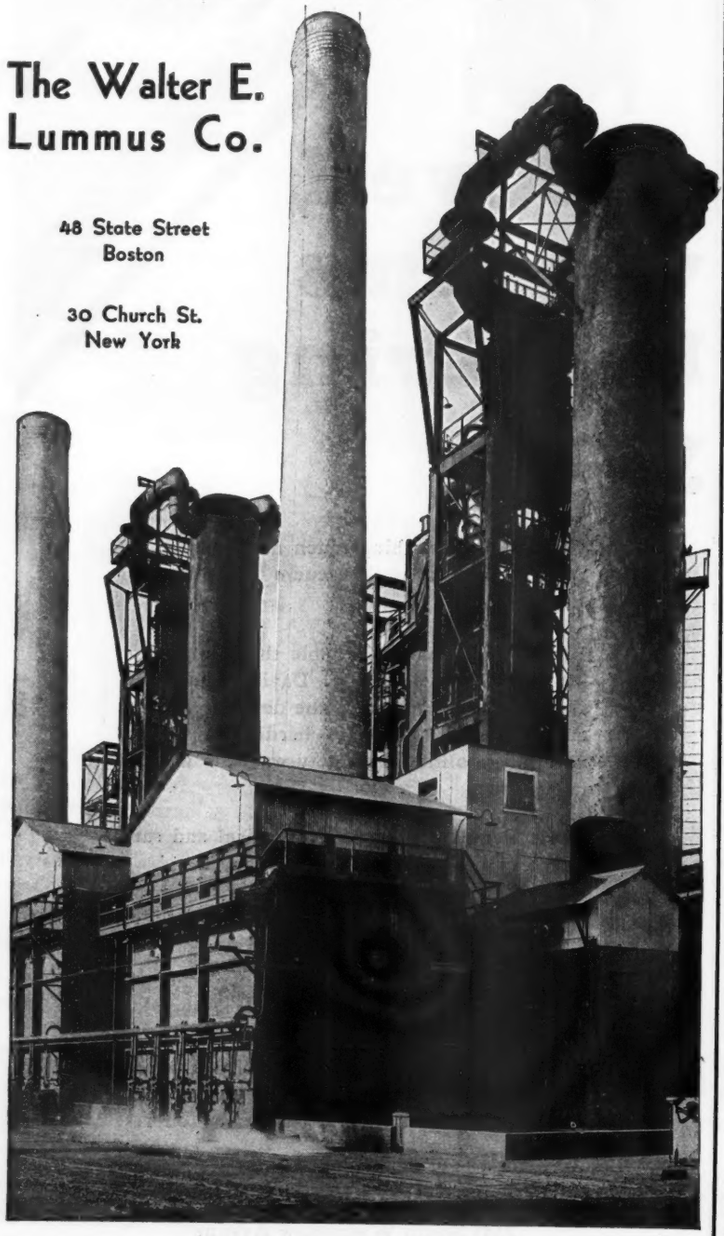

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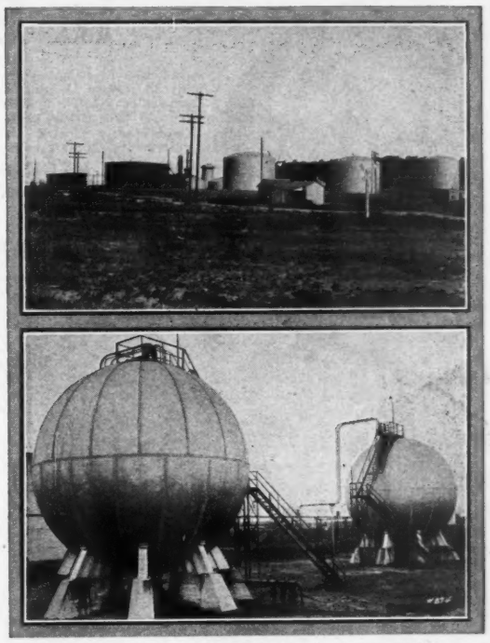
PITTSBURGH DES MOINES



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Lower View—PDM Spherical Gasoline Storage Tanks at the Baytown, Texas, plant of The Humble Oil and Refining Company. Capacity 2,500 barrels each.

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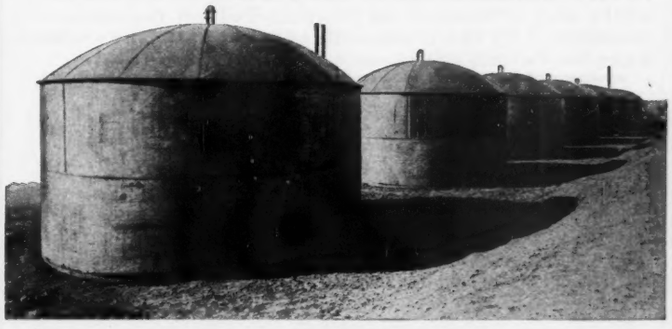

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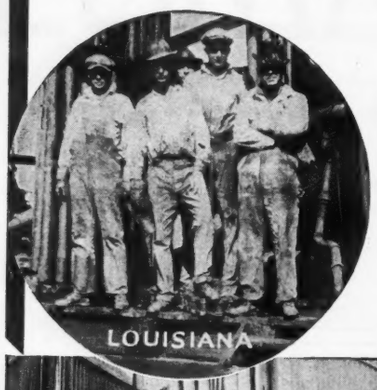

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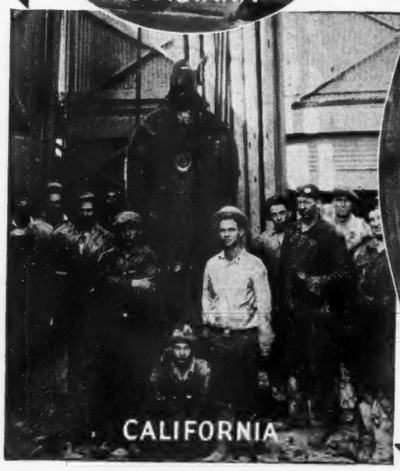

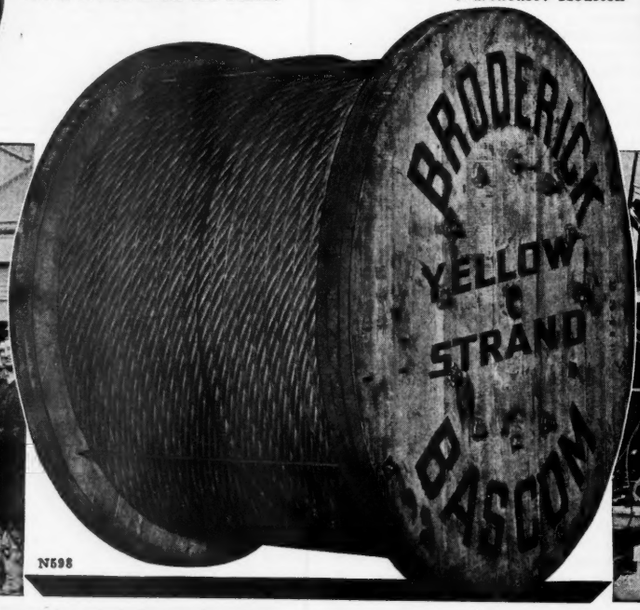

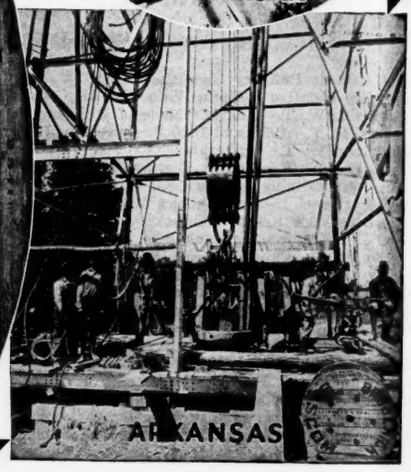

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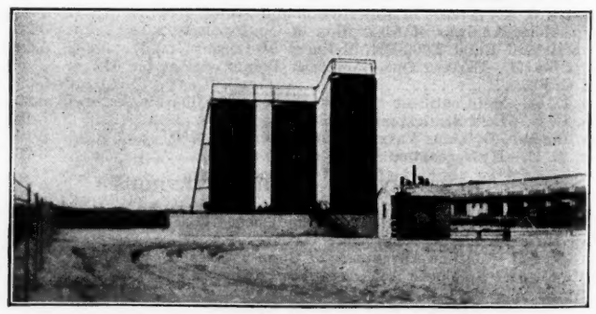

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GARVIN COUNTY

McMinn et al's No. 1 Carson, NE NW Sec. 5-3-4w ..... Drlg. 1,840 ft.
Nelson et al's No. 1 Strickland, NE NW Sec. 10-4-3w .... Shut down 2,880 ft.

GREER COUNTY

I. T. I. O. et al's No. 1 fee, C SW NE Sec. 17-6-24w ..... Drlg. 2,410 ft.

HARMON COUNTY

Harmon-Tex Oil Co.'s No. 1 Hoadley, NE cor. Sec. 17-4-24w ..... Drlg. 2,330 ft.
S. M. Stauffer's No. 1 Castleman, SW NE Sec. 8-4-26w.. Shut down 625 ft.

HARPER COUNTY

Empire's No. 1 Bruce, C NE SW Sec. 12-25-20w ..... Fishing 5,570 ft.
Sinclair Oil & Gas Co.'s No. 1 Howell, C SW SW Sec. 14-26-24w ..... 7,000,000 ft. gas; fishing 5,330-40 ft.; spraying oil.

HASKELL COUNTY

I. T. I. O.'s No. 1 Blake, SW NW Sec. 3-10-21 ..... Location.
Mid-Western's No. 1 Poister, C NE SE Sec. 33-10-22 .... Drlg. 3,265 ft.
Holden's No. 1 Phillip, SE cor. Sec. 3-9-18e ..... Shut down 1,860 ft.
Marion Oil's No. 1 Sanders, NW NE NW Sec. 10-9-18e .... Shut down 2,387 ft.
Sanbolse Gas' No. 1 Unknown, SW NW SE Sec. 32-9-21e.. Shut down 2,100 ft.

HUGHES COUNTY

Wright et al's No. 1 Ott, SE SW Sec. 15-5-11 ..... Shut down 1,645 ft.
Canady et al's No. 1 Kanard, NW SW Sec. 29-9-12 ..... 1,000,000 ft. gas 2,284 ft.; drlg. 4,500 ft.
Irwin et al's No. 1 Jones, SE NW Sec. 30-5-10 ..... Drlg. 4,270 ft.

KAY COUNTY

Boucher Oil Co.'s No. 1 Jefferson, NE SW Sec. 32-26-1w ..... Rig.
Alco Royalty Co.'s No. 1 Wolf, SE SW SE Sec. 34-26-2w.. Drlg. 4,420 ft.; 5,000,000 ft. gas.
Blankinship Petroleum Co.'s No. 1 Hansen, SW NW SW Sec. 17-27-2 ..... Sand 3,590-97 ft.; swabbed 34 bbls. after 40-qt. shot.

KINGFISHER COUNTY

Prairie and Slick's No. 1 Wright, C NW SW Sec. 23-15-5w ..... Drlg. 2,630 ft.
Galt Brown's No. 1 Wolf, NW SE Sec. 6-16-7w ..... Cleaning out 6,915 ft.

KIOWA COUNTY

Riley et al's No. 1 Grebb, SW NE Sec. 6-7-16w ..... Drlg. 50 ft.

LEFLORE COUNTY

Red Bank Oil Co.'s No. 1 fee, SE SW NW Sec. 23-9-24 .. Drlg. 6,190 ft.

LATTIMER COUNTY

Limestone Oil & Gas Co.'s No. 1 Murray, NE cor. Sec. 25-5-18 ..... Shut down 1,450 ft.

LINCOLN COUNTY

J. J. Deaner et al's No. 1 Knox, NE NW Sec. 28-17-2 .... Drlg. 4,213 ft.
Atlantic Oil Prod. Co.'s No. 1 Parker, SE NW Sec. 5-14-6 ..... Drlg. 3,150 ft.
Magnolia Pet. Co.'s No. 1 Winship, NE SW Sec. 2-13-4 .. Drlg. 4,735 ft.

LOGAN COUNTY

Slick & Ramsey's No. 1 Jones, SE NW Sec. 24-17-2w .... Drlg. 2,800 ft.
Prairie and Slick's No. 1 Morgan, NW NE Sec. 33-16-1w ..... Fishing 5,351 ft.
Eason Oil Co.'s No. 1 Young, C SW NE SW Sec. 34-17-4w. Drlg. 3,165 ft.

McINTOSH COUNTY

Patterson et al's No. 1 Smith, SW cor. NW SE Sec. 32-9-16 ..... Shot 240 qts. 5,446-5,559 ft.; shot went off up hole; fishing.

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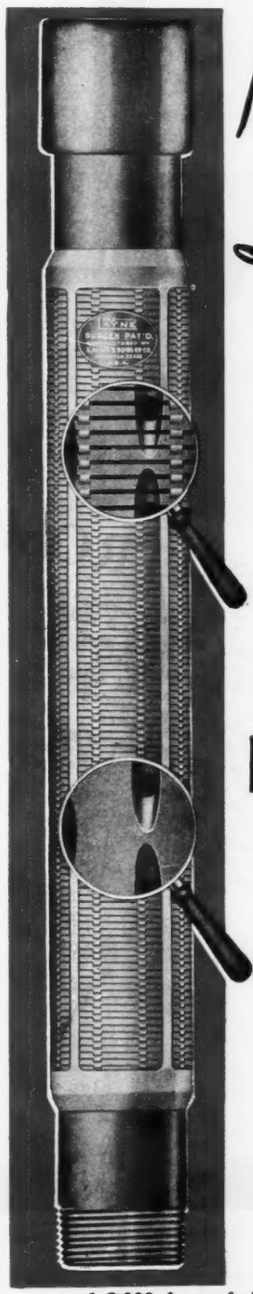

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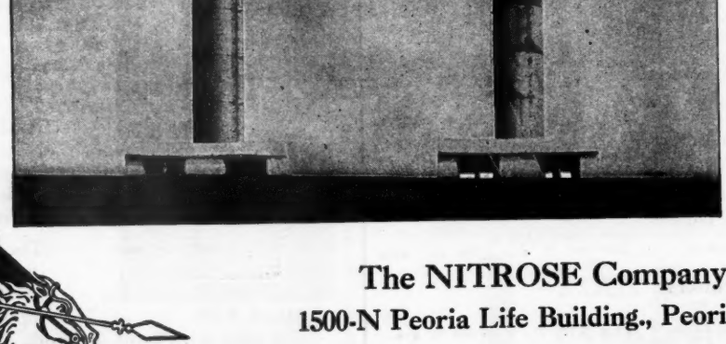

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NITROSE

MUSKOGEE COUNTY

Becker & Hutchinson's No. 1 May, SE NE Sec. 16-12-19..Shut down 520 ft.
Sioux Oil Co.'s No. 1 Unknown, NW SE Sec. 21-11-19 ....Shut down 1,011 ft.

NOBLE COUNTY

Weaver & Craigin's No. 1 Frederick, C SW NE Sec. 4-24-1w .....Shut down 2,425 ft.

OKFUSKEE COUNTY

Henry Oil Co.'s No. 1 Harjo, Sec. 36-12-9 .....Drlg. 3,890 ft.
E. L. Robinson's No. 1 Rice, NW Sec. 2-10-9 .....Location.
Shepard et al's No. 1 Neveas, SE NW SW Sec. 3-12-10..Shut down 3,661 ft.

OKLAHOMA COUNTY

Cromwell-Franklin's No. 1 Lincoln Park, SW cor. Sec. 12-12-3w .....Drlg. 4,177 ft.
L. C. Hivick's No. 1 Sunset Addition, NW SW NW Sec. 17-11-3w .....Drlg. 5,210 ft.
Mid-Kansas Oil & Gas Co.'s No. 1 Messer, SW cor. Sec. 32-14-3w .....Drlg. 6,410 ft.
Prairie and Slick's No. 1 Dill, SE NW Sec. 17-13-3w ....Drlg. 6,816 ft.
Warr et al's No. 1 Castle, SW NW Sec. 20-11-3w .....Shut down 6,217 ft.
J. F. Cuniff, trustee's No. 1 Church Land, NE SW SE Sec. 17-12-4w .....Drlg. 6,700 ft.
Magnolia and Ramsey's No. 1 Johnson, C NE SW Sec. 35-13-3w .....Drlg. 7,186 ft.
Ryan Consolidated's No. 1 Lawton, NE NW Sec. 3-11-2w..Drlg. 6,895 ft.

OSAGE COUNTY

Western American Oil Co.'s No. 1, NW SE Sec. 28-23-6 ..Drlg. 2,500 ft.

PAWNEE COUNTY

L. E. Wentz' No. 1 G. Lilly, SE SW NE Sec. 26-22-3 ....Drlg. 1,880 ft.
Flynn & Morgan's No. 1 Jones, SW NE Sec. 22-20-5 ....Drlg. 2,015 ft.
Cochran et al's No. 1 Green, NE cor. SW Sec. 15-23-5 ..Rig.

PITTSBURG COUNTY

Empire O. & R. Co.'s No. 1 Williams, C NE SE Sec. 33-7-16e .....P. B. to 1,664-1,704 ft.; shot and abandoned.

POTTAWATOMIE COUNTY

The Texas Company's No. 1 Knight SW SE Sec. 3-8-3 Drlg. 250 ft.

ROGER MILLS COUNTY

Bucy & Stone's No. 1 Williams, C SW Sec. 23-12-24w ..Shut down 2,245 ft.
L. C. Hivick's No. 1 Davis, C NW NE Sec. 4-11-26w ....Shut down 2,905 ft.

SEMINOLE COUNTY

Pure Oil Co.'s No. 1 Shaffer Ashby, SE NE Sec. 22-7-5..Drlg. 4,244 ft.
T. Adkins et al's No. 1 McGilbray, SE NE Sec. 4-8-8 ....Shut down 4,355-61 ft.; water.
Sunray Oil Co.'s No. 1 Sunday, NW SE Sec. 35-5-5 .....Location.

WASHITA COUNTY

Kauffman et al's No. 1 Nelson, NE cor. Sec. 1-8-14w ....Drlg. 1,235 ft.
Petroleum Holdings, Inc.'s No. 1 Musie, NW cor. Sec. 10-9-20w .....Shut down 280 ft.

WOODS COUNTY

Gypsy-Prairie et al's No. 1 Thompson, SE cor. SW Sec. 10-25-15w .....Shut down 6,104 ft.
Sinclair Oil & Gas Co.'s No. 1 Showwalter, C SW SW Sec. 33-27-16w .....Drlg. 7,176 ft.

WOODWARD COUNTY

Farrond et al's No. 1 Unknown, SE cor. SW SE Sec. 2-22-17w .....Shut down 1,387 ft.
Prairie Oil & Gas et al's No. 1 Wilbur, NE cor. NW Sec. 22-23-17w .....Shut down 7,445 ft.
Burgoyne Brothers' No. 1 Merkins, SW cor. SE NE Sec. 15-21-19w .....Shut down 1,910 ft.

OKLAHOMA PANHANDLE

CIMARRON COUNTY

Magnolia's No. 1 School Land, C SW NE Sec. 27-5-5 ....Drlg. 3,900 ft.

TEXAS COUNTY

Argus Prod. Co.'s No. 1 Fischer, C NW Sec. 29-6-14 ....Location.
Argus Prod. Co.'s No. 1 Parker, C NW NW Sec. 18-6-15 .....Rig on ground.
Three Way Oil Co.'s No. 1 Crane, SW NW Sec. 11-1-18 .....Drlg. 4,280 ft.
Palo Alto Oil Co.'s No. 1 Graves, NE SW SW Sec. 23-2-18e .....Spudded; shut down.

SOUTHERN OKLAHOMA

ATOKA COUNTY

Bryant-Croxton's No. 1 Mason, NW SE NW Sec. 4-1s-14..Shut down 1,850 ft.
Brookshire's No. 1 Guinn, NW cor. Sec. 18-3s-10 .....Shut down 100 ft.

BRYAN COUNTY

Bryan County Oil's No. 1 Childs, NW SE SW Sec. 8-7-10..Rig.
Bush et al's No. 1 Commerce Trust, NE cor. Sec. 35-6s-9 .....Shut down 525 ft.
Johnson et al's No. 1 Ussery, SE SW SE Sec. 14-16s-7e..Drlg. 485 ft.
Marshall's No. 2 fee, C SW SE NW Sec. 26-5s-7 .....Shut down; 6-in. csg. 265 ft.

CARTER COUNTY

Campen-Lasater Co.'s No. 1 Anderson, NE cor. SE NE SE Sec. 32-4s-2 .....Shut down 2,590 ft.

CHOCTAW COUNTY

Choctaw Petroleum Co.'s No. 1 Wilson, SW cor. SW Sec. 15-6s-19e .....Shut down 1,345 ft.

COTTON COUNTY

H. J. Dillard's No. 1 McMillan, SE NW Sec. 2-4s-13w ..Drlg. 1,050 ft.

LOVE COUNTY

Hobbs et al's No. 1 Roberts, NE cor. SW Sec. 20-6s-3w..Shut down 3,130 ft.
Gilcrease Oil's No. 1 Burkhart, NE NW Sec. 13-6s-1 ....Rig.

MARSHALL COUNTY

Pace et al's No. 1 Hicks, SW NW Sec. 8-6s-7 .....Drlg. 815 ft.
Walker et al's No. 1 Parks, NW NE NW Sec. 5-5s-5 ....Abandoned 675 ft.
McCrory et al's No. 1 Adams, NE SW SE Sec. 31-7s-6 ..Rig.
Akers et al's No. 1 Spicer, SW SE SE Sec. 33-5s-7e ....Shut down 370 ft.

McCURTAIN COUNTY

Milton et al's No. 1 Vase, SW NW Sec. 26-6s-21 .....Shut down 2,287 ft.

STEPHENS COUNTY

R. Southard's No. 1 McKinney, NE cor. Sec. 25-1-8n ....Shut down 1,060 ft.
Wirt Franklin Petroleum Corp.'s No. 1 McPhail, NW SE Sec. 1-2s-7w .....T. D. 4,529 ft.; shot 45 qts. at 4,-133-52 ft.; abandoned.

WILDCAT OPERATIONS IN KANSAS

(Continued from Page 52)

GREENWOOD COUNTY

Staats et al's No. 1 Swan, NE NW Sec. 3-25-12 .....Rig.
Harwood Oil Co.'s No. 1 Log, SW NE Sec. 20-25-10 .....Shut down 1,100 ft.
Mallory's No. 1 Denchfield, SE NW Sec. 12-27-9 .....Shut down 1,810 ft.
Bundy, Smith & O'Neil's No. 1 Ford, NE NW Sec. 28-25-13 .....Shut down 50 ft.
F. Konkay et al's No. 1 Rock, NW NE NE Sec. 7-27-12..Shut down 1,836 ft.

HARPER COUNTY

Beeler et al's No. 1 Bear, C NE Sec. 21-31-6w .....Shut down 1,830 ft.

KINGMAN COUNTY

Slick, Pryor & Lockhart's No. 1 Wetherall, NE SW Sec. 36-29-6w .....Spudding.

KIOWA COUNTY

Phillips-Prairie's No. 1 Bean, NE SE Sec. 10-30-17w ....Drlg. 3,450 ft.
McKenna et al's No. 1 Ralson, C NE Sec. 14-28-20w ....Rig.

LYONS COUNTY

Griffith et al's No. 1 King, NW cor. Sec. 8-19-10 .....Shut down 910 ft.

MARION COUNTY

Magnolia Pet. Co.'s No. 1 Davis, SE NW Sec. 18-21-2 ....Drlg. 2,075 ft.
Dixie and Arkansas Fuel's No. 1 Hacker, NW NE Sec. 6-17-1 .....Drlg. 2,032 ft.
Marshall et al's No. 1 Higgins, NE cor. Sec. 33-19-5 ....Rig.

MARSHALL COUNTY

Swicker & Sincox's No. 1 Remple, C N half NW Sec. 22-4-9 .....Drlg. 1,245 ft.
Brazier et al's No. 1 Runkel, SE NW Sec. 13-2-6 .....Shut down 50 ft.

McPHERSON COUNTY

Aladdin Pet. Co.'s No. 1 Larson, C NW Sec. 22-18-4w ....Rig on ground.

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Simmons & Canary's No. 1 Bishop, NW SW Sec. 15-18-1w ..... Drlg. 3,272 ft.
Harry Skelly et al's No. 1 Neufeldt, SE NE Sec. 19-21-3w ..... Rig.

MIAMI COUNTY

Clark's No. 1 Vaughn, SE SW Sec. 28-17-22w ..... Shut down 1,200 ft.

MORTON COUNTY

Argus Prod. Co.'s No. 2 Drubilbis, C NW Sec. 9-34-39w ... Rigging up standard tools 2,586 ft.
Argus Prod. Co.'s No. 1 Morgan, C NW Sec. 8-33-39w .... Rig on ground.
Argus Prod. Co.'s No. 1 Tillet, C SW Sec. 21-34-39w ..... Drlg. 2,514 ft.
Argus Prod. Co.'s No. 1 Sullivan, C NW Sec. 29-34-39w .. Rigging up standard tools 2,536 ft.
Argus Prod. Co.'s No. 1 Burton, C SE Sec. 11-33-40w ..... Completed 2,437-2,761 ft.; 1,500,000 ft. gas.
Argus Prod. Co.'s No. 1 Mangels, C SE Sec. 4-33-39w .... Completed 2,543-2,770 ft.; 1,500,000 ft. gas; total depth 3,312 ft.
Argus Prod. Co.'s No. 1 Garner, C SE Sec. 18-33-39w .... Fishing 2,563 ft.
Argus Prod. Co.'s No. 1 Watson, C NE Sec. 27-34-40w ... Drlg. 2,640 ft.
Hydraulic Oil Co.'s No. 1 State Land, NW SE Sec. 22-24-43w ..... Drlg. 2,650 ft.; gas at 1,200-10 ft and at 1,350 ft.

MORRIS COUNTY

Henderson et al's No. 1 Selsman, SW SE Sec. 24-16-9 ... Rig.
Urschell et al's No. 1 Scott, NE NW Sec. 6-16-6 ..... Shut down 2,420 ft.

OSAGE COUNTY

Riggs & Smith's No. 1 Wood, SE NW Sec. 21-14-15 ..... Drlg. 410 ft.

PAWNEE COUNTY

Skelly Oil Co.'s No. 1 Milhouse, C SE Sec. 34-23-17w .... Drlg. 4,640 ft.

PRATT COUNTY

Wilcox O. & G. Co.'s No. 1 Bappin, SW NW Sec. 7-26-15w ..... Drlg. 4,220 ft.

RENO COUNTY

Alco Royalty's No. 1 Kinney, SE cor. Sec. 16-22-7w ..... Rig.
Shell Pet. Corp.'s No. 1 Popp, NW cor. Sec. 11-25-5w .... Drlg. 2,092 ft.
E. L. Study and H. L. Turner's No. 1 Haury, NE NW Sec. 1-23-4w ..... Drlg. 2,850 ft.
Phillips Pet. Co. and Tom Palmer's No. 1 Harsch, NE SE Sec. 14-26-5w ..... Drlg. 3,450 ft.
United Pet. Co.'s No. 1 Houston, NW cor. Sec. 4-22-10w.. Drlg. 2,650 ft.
C. A. Cheney and M. M. Valerius' No. 1 Stevens, C NE SE NE Sec. 6-26-7w ..... Drlg. 3,830 ft.

RICE COUNTY

United Pet. Co.'s No. 1 Willman, NE cor. Sec. 29-21-9w.. Rig.
Gypsy Oil Co.'s No. 1 Koch, SE NE NW Sec. 35-20-9w .. Drlg. 2,625 ft.
Hershey Golden & Skelly's No. 1 Brandenstein, Sec. 10-19-10w ..... Rig on ground.
McPherson and Shell's No. 1 Jennings, NE SW NW Sec. 29-18-6w ..... Fishing 3,497 ft.
Miller & Brown's No. 1 Schartz, Sec. 14-20-10w ..... Drlg. 3,078 ft.
Hoffner, Lee & Shell's No. 1 Slad Farm Corp., C SW Sec. 33-19-6w ..... Drlg. 2,930 ft.
Tatlock et al's No. 1 Ploog, C SW SE Sec. 33-18-9w .... Silicious lime 3,252-53 ft.; made 383 bbls. in 12 hrs.

ROOKS COUNTY

Streeter-Stearns' No. 1 Conger, SE NW NE Sec. 16-10-16w ..... Shut down 250 ft.

RUSH COUNTY

Prairie et al's No. 1 Lecker, NW SW SW Sec. 5-16-18w.. Drlg. 1,400 ft.
Syndicate Oil Co.'s No. 1 Lannen, C SW Sec. 11-18-16w .. Location.
McPherson O. & G. Co.'s No. 1 Brack, C NW Sec. 24-17-16w ..... Drlg. 3,527 ft.
Syndicate Oil Co.'s No. 1 Mohr, C SW Sec. 2-18-16w .... Shut down 3,480 ft.
Danciger Oil & Refining Co.'s No. 1 Nave, NW cor. Sec. 26-17-17w ..... Total depth 3,606 ft.; shut down

RUSSELL COUNTY

Streeter & Stearns' No. 1 Mitchell, SE cor. Sec. 6-15-14w. Drlg. 2,785 ft.
Empire O. & R. Co.'s No. 1 Herbel, NW NE SW Sec. 26-14-14w ..... Drlg. 3,261 ft.
Slick et al's No. 1 Berrick, SE SW Sec. 23-15-13w ..... Show oil, gas and water 3,292-3,322 ft.; shut down; P. B. to 3,307 ft.
Austin Drlg. Co.'s No. 1 Rochfellow, SE cor. Sec. 6-13-12w ..... Shut down 1,884 ft.
Gilbreath et al's No. 1 Bratton, C NE Sec. 33-11-13w .... Shut down 1,010 ft.

SEDGWICK COUNTY

Newman et al's No. 1 Bawly, SE NW NE Sec. 2-27-2 .. Drlg. 2,637 ft.
Tavender et al's No. 1 McLean, SE SW SE Sec. 23-26-1w ..... Shut down 975 ft.

SALINE COUNTY

Twin Mounds Oil Co.'s No. 1 Weis, C W half NE NW Sec. 20-13-4w ..... Drlg. 2,042 ft.

STAFFORD COUNTY

Boucher Oil's No. 1 Christenson, NW cor. Sec. 22-22-11w.. Drlg. 3,300 ft .
Boucher Oil's No. 1 Groves, NE cor. Sec. 9-22-11w ..... Drlg. 2,905 ft.
Midwest's No. 36 Richardson, SE cor. Sec. 36-22-12w .... Drlg. 3,100 ft.

STEVENS COUNTY

Argus Prod. Co.'s No. 1 Headrick, C NW Sec .9-35-37w .. Drlg. 410 ft.
Agate Oil Co.'s No. 1 Gregory, NW NE Sec. 19-33-38w .. Rigging up standard tools 2,470 ft.
Argus Prod. Co.'s No. 1 Hershey, C NW Sec. 26-34-37w .. Drlg. 400 ft.
Argus Prod. Co.'s No. 1 Ehrhard, C NW Sec. 11-35-39w .. Drlg. 2,135 ft.
Argus Prod. Co.'s No. 1 Wiley, C NE Sec. 4-35-37w ..... Drlg. 1,755 ft.
Argus Prod. Co.'s No. 1 Ridpath, C SE Sec. 27-34-37w ... Drlg. 2,385 ft.
Argus Prod. Co.'s No. 1 Gibbons, C SE Sec. 29-34-37w .... Drlg. 1,800 ft.
Argus Prod. Co.'s No. 1 Knier, C SW Sec. 27-34-37w ..... Drlg. 2,543 ft.
Argus Prod. Co.'s No. 1 Harrison, C SW Sec. 30-34-37w .. Drlg. 1,800 ft.
Argus Prod. Co.'s No. 1 Irwin, C SE Sec. 10-35-37w ..... Drlg. 1,740 ft.
Argus Prod. Co.'s No. 1 Libon, C NE Sec. 2-34-39w ..... Rigging up standard tools 2,516 ft.
Barrington et al's No. 1 Creamer, C NW Sec. 2-35-39w.. Shut down 2,350 ft.
Braden et al's No. 1 Theisen, SE NE Sec. 6-22-4w ..... Rig on ground.
Freedell Const Co.'s No. 1 Presinger, C SE Sec. 22-31-38w ..... Drlg. 2,555 ft.
Mangle et al's No. 1 Youngren, C SE NW Sec. 24-32-39w ..... Shut down 2,523 ft.
McNabb and Mid-Kansas' No. 1 Rhinehart, C NE Sec. 23-32-39w ..... Rig.
McNabb et al's No. 1 Porter, Sec. 4-31-37w ..... Drlg. 2,442 ft.
W. Sidwell et al's No. 1 Kelly, SW cor. NE Sec. 16-34-38w ..... Shut down 1,600 ft.

SUMNER COUNTY

Magnolia Pet. Co.'s No. 1 Shriver, NW SW Sec. 9-33-2 .. Fishing 1,980 ft.
Disney et al's No. 1 Fay, C E half SE Sec. 14-34-1w .... Rig.
Davidson et al's No. 1 Strickland, SW cor. SE Sec. 12-35-1w ..... Rig.

WASHINGTON COUNTY

Sincox et al's No. 1 Penwell, NW SE NE Sec. 16-3-3 .... Drlg. 510 ft.

WILDCAT OPERATIONS IN NEBRASKA

FRANKLIN COUNTY

U. R. Drlg. Co.'s No. 1 Brunkle (twin well), C NW SW NE Sec. 2-3n-13w ..... Rig.

CHASE COUNTY

Chase Pet. Co.'s No. 1 Ingold, C NE Sec. 24-6n-38w .... U. R. 5-in. csg.; T. D. 4,265 ft.

FURNAS COUNTY

Southwestern Pet. Corp. of Nebraska's No. 1 Montague, SE SW NW Sec. 28-1n-22w ..... Shut down 1,750 ft.
Graham Bros.' No. 1 Edwards, NW SW Sec. 13-2n-22w.. Shut down 3,250 ft.

PHELPS COUNTY

Trees Oil's No. 1 Bergan, Sec. 22-6-19w ..... Rig on ground.

RICHARDSON COUNTY

Norton et al's No. 1 Albin, NE cor. Sec. 26-1-14 ..... Miss. lime 2,200 ft.; landing 8-in. casing.

ROCK COUNTY

North Central Dev. & Drlg. Co.'s No. 1 Leonard, SE cor. NE Sec. 14-32-18w ..... Drlg. 900 ft.

WEBSTER COUNTY

Mid-Kansas Exploration Co.'s No. 1 Platt, C SE one-half Sec. 2-1n-11w ..... Drlg. 2,125 ft.

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Tulsa, Okla.

NEW LOCATIONS

(Continued from Page 118)

of Section 2,247, T.E.&L. A. H. Parks' No. 1 S. S. Wallace, 450 feet south and 150 feet west of the NE cor. of the S. S. Wallace 70-acre tract out of the S. Tynes Survey, A-274. A. H. Stolz' No. 1 Carroll Baldwin estate, 150 feet south and east of the NW cor. of the N half of the SE of Section 20, T.E.&L. Whatley & Kinsley's No. 1 G. H. Roach, 150 feet north and 450 feet west of the SE cor. of the G. H. Roach 109-acre tract out of Section 1,443, T.E.&L. Williamson & Lewis' No. 1 J. T. Loftin, 450 feet north and west of the SE cor. of the east 100 acres of the J. T. Loftin 160-acre tract out of the A. Wood Survey, A-1,274.

Wise-Jackson and Devonian Oil Co.'s No. 1 J. E. Brown, 150 feet south and 250 feet west of the middle of the north line of the south 60 acres of the north 120 acres of the E half of Section 225, T.E.&L. Hinson & Tidwell and others' No. 1 J. F. Hall, 990 feet north and 600 feet east of the most southerly SW cor. of the D. R. Akin Survey, A-2,240.

CORRECTED LOCATIONS

Carson County

Empire Gas & Fuel Co.'s No. 26 S. B. Burnett, at the C of the SE of Section 78, Block 5, I.&G.N.

Coleman County

Arcadia Refining Co. and others' No. 1 Frank Golson, 2,213 feet south and 727 feet east of the NW cor. of Isaac Harris Survey No. 164, A-381.

Brown County

A. B. Gordon and others' No. 7 S. B. Cannon-A, 450 feet north and west of the SE cor. of their lease out of the W. Ahrenbeck & Brother Survey No. 3, A-20.

Pecos County

Landreth Production Co. and Henshaw Brothers' No. 2 University Land-I, 990 feet south and 330 feet west of the NE cor. of Section 24, Block 18, University Land.

Palo Pinto County: F. Guyer, trustee's No. 1 G. C. Jones, 150 feet north and west of the southeast corner of the south 40 acres of the J. A. Fortune Survey, A-186.

KENTUCKY-TENNESSEE

(Continued from Page 80)

Adaburg Pool, in the Stray sand at 435 feet, while No. 2 pumped 10 bbls., and his No. 1 on the Louis Howard farm, same pool, is a nice gas well at 400 feet.

Daviess County Wells

The Jetsan Oil Co. struck a 1,000,000-foot gas well in the Barlow sand in No. 4 on the Hinton north 62 acres, in the Jones Pool, in Daviess County, and No. 5 well, 800 feet from the north line and 200 feet from the south line of the same farm, produced 25 bbls. initial from the McCloskey sand at 1,145 feet.

Leeper Oil Co.'s No. 6 on the C. D. Veach 209 acres, 200 feet from the north line and 1,400 feet from the west line of the lease, proved a fair gas producer, with No. 7 drilling.

Penn-Indiana Oil Co.'s second test on the First National Bank & Trust Co. farm, in the Burton Pool, pumped 12 bbls. in 24 hours.

Osborne and others' test on the Rafe McDaniel farm, near Whitesville, and on a block of 1,100 acres of leases, produced 20 bbls. under pump from the Barlow sand at 887 feet.

Evans & Garrison's No. 14 on the Davis heirs 109 acres, in the Red Hill Pool, pumped 20 bbls. initial. Pet Oil Co.'s No. 2 on the John Howard farm, in the Howard Pool, pumped 8 bbls. from the McCloskey sand at 1,150 feet.

Hupp, Duff and others' No. 7 on the W. G. Hayden No. 2 farm, in the Maxwell Pool, is reported with an initial of 50 bbls., and the same company's No. 2 Ollie Atherton farm, same pool, pumped 15 bbls.

Shell Petroleum Corp.'s No. 4 on the W. T. Weatherford farm, in the Cane Run area, pumped 10 bbls., and Hupp & French's No. 5 on the W. T. Ware 80

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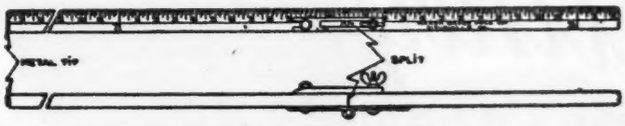

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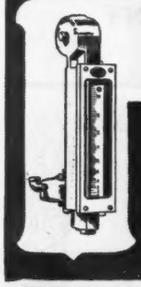

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acres, same area, also pumped 10 bbls. in 24 hours.

McLean County Wells

Trout, Cameron and others' No. 1 on the R. A. Baught farm, in the Calhoun Field of McLean County, pumped 15 bbls. initial at 1,226 feet. McLean Development Co.'s test on the J. C. Jones farm, same area, was dry in the Jett, Jones and Barlow sands. Miller & Damron's No. 2 on the G. F. Dunn 100 acres, in the Barrett Hill Pool, is reported good for 35 bbls. initial, while H. C. Smith's No. 1 Whitehouse farm, same pool, was a dry hole.

Henderson County Wells

In the Niagara Pool of Henderson County, the Niagara Oil & Gas Co. struck a gas well rated at 800,000 feet in the Miss Lea Gish land. Perry E. Tichnour's No. 6 J. E. Knight, same pool, pumped 15 bbls. in 24 hours.

Sebree Field

Craig & Lowery, eastern operators, drilled in a 300,000-foot gas well on the H. A. Walker farm, in the Sebree Pool, of Webster County. This is one of the older producing areas of the extreme western part of Kentucky.

July Runs

Total runs made from wells served by the Illinois Pipe Line Co. in western Kentucky during the month of July were 305,852.03 bbls., or 38,766.50 bbls. more than for June. Of the seven months runs of the current year, the largest runs were 307,034.97 bbls. in May, making July the second largest in runs.

Lowman, Daley & Stevens, operators of Cleveland, Ohio, drilled in a dry hole on the Mosley farm, near Buford, in western Ohio County, and the location was looked upon as almost a sure shot to be an extension to the Barnett's Creek stray sand pool.

NEW ZEALAND MONOPOLY?

A proposal is before Parliament that the New Zealand government enter into an agreement with a British oil firm to form a monopoly in this country's markets to combat American interests. The foremost American companies marketing oil products in New Zealand are Vacuum Oil Co., The Texas Company and, jointly, Atlantic Refining Co. and Union Oil Co. of California. A number of other companies also send shipments of oil from California to independent importers in New Zealand. Royal Dutch-Shell also markets in New Zealand to an important extent.

AUSTRALIAN SHALE

The board of directors of the North Broken Hill, the Broken Hill South, the Zinc Corp. and the Electrolytic Zinc companies have issued a joint statement announcing the purchase of an oil refining plant option over 11,000 acres of oil shale lands at Newnes in New South Wales, 150 miles to the northwest of Sydney. A minimum output is contemplated of 100 tons of crude oil per day.

LEGAL

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UNITED STATES LAND OFFICE
Washington, D. C., July 17, 1930.

Notice is given that the following described lands in two units in Pawnee County, Oklahoma, are offered for sale under section 17 of the leasing act of February 25, 1920 (41 Stat. 437), at the royalty rates for oil and gas and in accordance with the drilling requirements fixed in the standard lease form, copy of which may be procured from the Commissioner of the General Land Office:

Unit No. 1—
T. 20 N., R. 9 E., Sec. 35, lot 2 (13.40 acres).
Unit No. 2—
T. 20 N., R. 9 E., Sec. 35, lot 3 (12.05 acres).

Offers may be submitted on each unit and on the combined units, each unit to be considered separately as to drilling requirements and royalty rates.

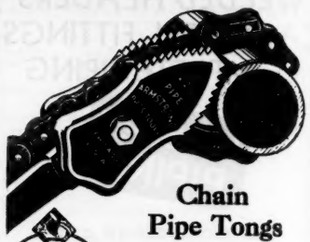
The sale will be held at 10:00 a. m. on 10th day of September, 1930, at the office of the U. S. Geological Survey, 411 Wright Building, Tulsa, Oklahoma, and the successful bidder will be required to deposit on the date of sale one-fifth of the bonus bid by certified check on a solvent bank, or cash.

The bidders are warned against violation of the provisions of section 59, U. S. Criminal Code, approved March 4, 1909, prohibiting any unlawful combination or intimidation of bidders.

The right is reserved to reject any and all bids in the discretion of the Secretary of the Interior.

(Signed) C. C. Moore,
Commissioner.

ARMSTRONG



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Every Chain Proof Tested to Within ¾ of Specified Strength

These tongs are built to give greater service. Handle is forged from high carbon steel — both stiffness and spring. Jaws are drop forged from special steel, treated, hardened and tested for toughness. The Bolt is extra large and the connecting link is drop forged from Chrome Nickel steel. Sizes for pipes from ⅛" to 18".

Every Chain is Proof-tested to within ¾ of specified strength.

Write for Catalog P-10.

ARMSTRONG BROS. TOOL CO.
330 N. Francisco Ave., Chicago, U. S. A.

DIVIDEND NOTICE
Imperial Royalties Company

(Established April, 1920)

Will pay a monthly dividend of 18 cents a share on its Class A Preferred, also a dividend of 1½% on its old Preferred, both payable Aug. 30 to shareholders of record Aug. 25.

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Trustees
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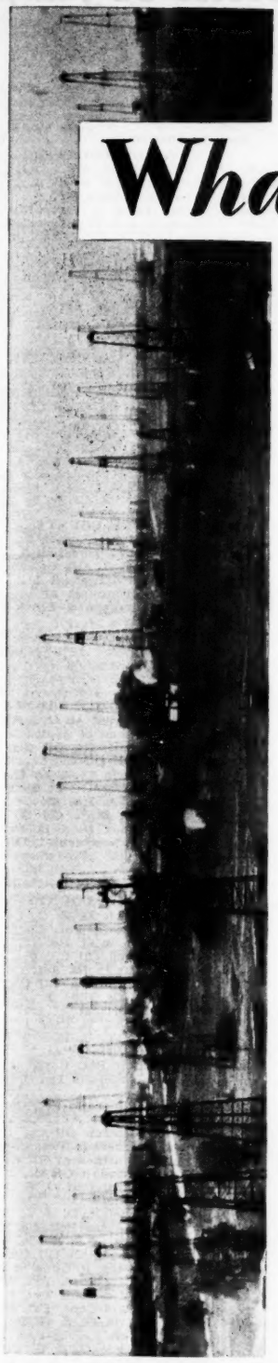


A typical view of a small section of the Oklahoma City Field that offers a steadily increasing market for oil field supplies and equipment.

What does this $53,350,000 oil field supply market mean to you?

There are 605 drilling wells in the Central Area in Oklahoma, this area is now producing 66.6% of the state's oil.

Figured at the average cost per well, this represents an investment in materials alone, such as derricks, casing, tanks, batteries, separators, water tanks and the like of $53,350,000.

...and geologists who know this area tell us that some 400 additional wells will be drilled in the Oklahoma City field alone within the next year or two.

Those who will cash in on this big equipment market are the ones who will be in a position to offer prompt service. The answer is to locate a factory branch or wharehouse in the most accessible point in this fast growing oil area.

A study of the two maps at the bottom of this page conclusively proves Oklahoma City to be that point. It is in the geographical center of the Central Area, and it offers the most satisfactory transportation facilities of any city in the state.

Economical, dependable electric power through the state's largest interconnected plant and transmission line system, sufficient to take care of any industrial demand, is available at attractive rates.

Complete data on Oklahoma City as the ideal distributing point for Oil Field supplies has been compiled for you. Write for it today.

FOUR GOOD REASONS

The Chamber of Commerce
Oklahoma City, Oklahoma

July 12, 1930

Gentlemen:

There are four reasons why we located our plant in Oklahoma City:

First, railroad connections, having direct lines from the east, through Kansas City and St. Louis, whereby we may receive our raw material, such as machinery, steel in bar and billet form in from five to seven days, from eastern manufacturing points. And a direct outlet to the west, south and north to all points in the midcontinent oil field for quick delivery. And for export, weshave outlet south by the way of Galveston, to foreign points. Being the most centrally located shipping point in the southwest.

Second, being in the heart of the largest undeveloped oil region in the world where Rotary tools, which is our line of manufacture, are used.

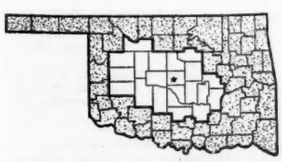
Third, good roads to areas that may readily be reached by truck for fast freight service.

Fourth, Oklahoma has a delightful and healthful climate as well as desirable surroundings for employees. And unusually good schools which must always be taken into consideration, which keeps the permanent employee into a satisfied state of mind.

Yours very truly,
A. F. SPENGLER COMPANY
By Artnur F. Spengler

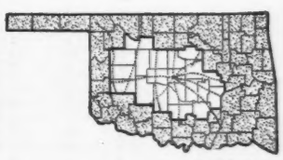
OKLAHOMA CITY CHAMBER of COMMERCE

OKLAHOMA CITY, OKLAHOMA



The Central Area, indicated above produces 66.6% of Oklahoma's oil and contains 66.2% of all the drilling wells and rigs in the state.

No other distributing point offers the transportation facilities of Oklahoma City. Seven railroads converge at Oklahoma City. Sixty class "A" Truck Lines operate one or more Trucks daily into and out of Oklahoma City serving 312 towns in Oklahoma direct as well as adjoining states.



Detailed Operations in All Fields for Month of July

SUMMARY OF ALL FIELDS

Wells Completed

	Comp.	Prod.	Dry	Gas
Eastern	286	1,545	34	49
Central Ohio	81	1,280	21	35
Lima	18	275	4	3
Indiana	21	182	11	4
Michigan	21	2,180	9	1
Kentucky	130	3,521	28	18
Illinois	15	84	7	0
Kansas	70	14,938	32	1
Oklahoma	281	474,705	81	37
North Central Texas	285	19,538	152	8
East Central Texas	27	70,551	10	0
East Texas	2		1	1
West Texas	59	56,900	14	0
Panhandle Texas	53	11,346	1	18
Gulf Coast	171	81,700	67	6
Southwest Texas	102	16,691	40	7
North Louisiana	87	11,719	14	37
Arkansas	13	198	7	1
Montana	20	820	5	5
Wyoming	15	1,853	6	0
Colorado	6	230	3	1
New Mexico	22	122,695	1	1
Total July	1,785	862,951	548	233
Total June	2,011	638,560	590	276
Difference	226	224,391	42	43

Rigs and Wells Drilling

	Rigs	Drlg.	Ttl.
Eastern	66	228	294
Central Ohio	69	184	253
Lima	1	33	34
Indiana	3	45	48
Michigan	70	112	182
Kentucky	7	136	143
Illinois	3	32	35
Kansas	42	236	278
Oklahoma	141	851	992
North Central Texas	57	317	374
East Central Texas	7	29	36
East Texas	8	13	21
West Texas	45	235	280
Panhandle Texas	31	155	186
Gulf Coast	27	201	228
Southwest Texas	116	151	267
North Louisiana	72	124	196
Arkansas	14	37	51
Mississippi	7	27	34
Alabama	2	3	5
Montana	19	102	121
Wyoming	30	111	141
Colorado	18	81	99
New Mexico	25	86	111
Utah	1	29	30
Total July	881	3,558	4,439
Total June	921	3,722	4,643
Difference	40	164	204

Note—In the following report the Section, Township and Range are given first; then the farm, the owner, the serial number of the well and the initial production of the well. In lines where the Section, Township and Range are missing the wells are located in the Sections, Townships and Ranges which appear next above in the report.

OKLAHOMA FIELDS

Summary of Wells Completed

County—	Comp.	Prod.	Dry	gas
Carter	3	509	2	0
Creek	21	965	7	1
Cotton	9	385	4	0
Hughes	4	15	3	0
Lincoln	6	10,321	3	0
Marshall	13	358	6	0
Muskogee	26	546	9	7
Okfuskee	7	300	4	0
Oklahoma	42	360,223	0	3
Okmulgee	11	77	3	3
Osage	20	330	7	7
Pawnee	6	274	1	2
Pottawatomie	10	16,182	0	0
Seminole	53	70,433	9	4
Stephens	9	35	5	2
Wagoner	7	....	5	2
Miscellaneous	34	13,752	13	6
Total July	281	474,705	81	37
Total June	387	414,510	105	34
Difference	106	60,195	24	3

Summary of Rigs and Wells Drilling

County—	Rigs	Drlg.	Ttl.
Alfalfa	0	2	2
Atoka	0	1	1
Beckham	2	3	5
Blaine	0	1	1
Bryan	0	3	3
Caddo	5	19	24
Canadian	0	1	1
Cherokee	0	1	1
Coal	0	4	4
Carter	4	14	18
Cleveland	2	10	12
Comanche	1	5	6
Cimarron	0	1	1
Cotton	5	3	8
Creek	13	41	54
Garfield	0	6	6
Garvin	1	1	2
Grady	3	3	6
Greer	0	2	2
Grant	0	4	4
Harper	0	2	2
Harmon	0	1	1
Hughes	2	16	18
Haskell	0	3	3
Jefferson	0	2	2
Kay	1	7	8
Kiowa	0	1	1
Kingfisher	1	1	2
LeFlore	0	2	2
Lincoln	0	18	18
Latimer	0	2	2
Logan	1	6	7
Love	0	1	1
McIntosh	0	2	2
Marshall	2	7	9
Muskogee	8	33	41
Murray	0	1	1
Noble	0	5	5
Okfuskee	3	21	24
Oklahoma	46	341	387
Okmulgee	0	19	19
Osage	7	40	47
Pawnee	3	15	18
Payne	2	11	13
Pittsburg	1	4	5
Pontotoc	2	15	17
Pottawatomie	10	37	47
Roger Mills	0	2	2
Seminole	12	67	79
Stephens	3	10	13
Texas	0	3	3
Tulsa	1	13	14
Washita	0	1	1
Washington	0	1	1
Wagoner	0	11	11
Woods	0	3	3
Woodward	0	2	2
Total July	141	851	992
Total June	162	793	955
Difference	21	58	37

WELLS COMPLETED

CARTER COUNTY

30-1s -3w McCartney, Prairie O. & G. 3 dry
24-1s- 3w E. R. Spigner, Magnolia Pet. Co. 2 509
22-1s- 3w Watkins, L. J. Woodruff 1.. dry

Wells completed 3
Production 509
Dry 2

CREEK COUNTY

22-19- 9 Bough, Sells & Matych 1-A .. 35
27-16-10 Mooney, Curtis Oil Co. and Margay Oil Co. 1 25
36-15- 7 Strip, C. L. Freeland 2 ..... gas
4-19- 9 Primer, Bert Swift et al 1-A dry
28-19- 9 Halsey, Jackson & Wise 1.. dry
10-17- 9 Bruce, Shell Pet. Corp. 7 .. 40
32-17-11 Daniel, C. A. Mechling 1-A. dry
29-15-10 McIntosh, E. A. Hill et al 1-A dry
2-19- 7 Johnson, J. H. Markham Jr. 2 dry
20-19- 9 Bible, Irelan & Dean 2 160
Carter, Phillips Pet. and Gled Oil 2 125
21-19- 9 Davis, E. L. Robinson et al 1 100
10-17- 9 Grayson, Cooney, Henry et al 1 ..... dry
23-19- 8 Anthis, I.T.I.O. Co. 2 15
14-19- 9 Morgan, C. O. Buckles et al 1-A 150
20-19- 9 Carter, Phillips Pet. Co. and Gled Oil 3 210
10-17- 9 Bruce, Prairie O. & G. Co. 2 40
10-17-10 Baker, O. M. Irelan 1 ..... dry
18-14- 9 Baker, C. G. Tibbins O. & G. Co. 3 22
18-14- 9 Bartlett, C. G. Tibbins Oil & Gas Co. 2 25
7-14-10 Micco, J. A. Swindler et al 1 18

Wells completed 21
Production 965
Dry 7
Gas 1
Gas production 35,000,000

COTTON COUNTY

36-1s-10w School, Wirt Franklin Pet. Corp. 2 20
1-2s-10w Patterson, Garvin & Gant 5.. 40
2-2s-10w Cobb, Shasta Oil Co. 8 100
27-2s-11w Grossman, Cole & Colvert 1.. dry
2-2s-10w Cobb, Shasta Oil Co. 7 100
1-2s-10w Chambers, Harris & McNeal 6 dry
2-2s-10w Chambers, Silurian Oil Co. and Perkins & Cullum 5 .. dry
Burneaugh, Shasta Oil Co. 8 125
29-1s- 9w Mah-Bah-Quak, J. B. Nantz 2 dry

Wells completed 9
Production 385
Dry 4

HUGHES COUNTY

10- 9-10 Penn, McGee Bros. 1 ..... dry
28- 9-10 Brooks "C," Iglehart et al 1 dry
27- 9-10 Gammill, Prairie O. & G. Co. 1 15
8- 6-10 Peters, R. P. Wheelan 1 ..... dry

Wells completed 4
Production 15
Dry 3

LINCOLN COUNTY

8-14- 4 Staubus, Magnolia Pet. Co. 4 dry
16-14- 4 Wolfe, Prairie O. & G. Co. 1 dry
7-14- 4 Benedict, Magnolia Pet. Co. 1 5348
Fee, Thomas B. Slick Oil Co. 2 2147
8-14- 4 Staubus, Magnolia Pet. Co. 3 dry
7-14- 4 Norton, Prairie O. & G. Co. 3 2826

Wells completed 6
Production 10,321
Dry 3

MARSHALL COUNTY

14-5s- 5 Taliferro, Bilbo Oil Corp. 12.. 30
24-5s- 5 Null, F. W. Merrick 1 16
30-5s- 5 Davis-Sullivan, Max Westheimer 5 ..... dry
10-5 - 5 Wilson, H. B. Hearle 1 ..... dry
14-5s- 5 Taliferro, Bilbo Oil Corp. 11.. 45
25-5s- 5 Arbuckle, Oklahoma Bay Transit Co. 1 ..... dry
30-5s- 5 Sullivan, Max Westheimer 6.. 37
5-5s- 5 Parks, J. C. Walker et al 1.. dry
14-5s- 5 Taliferro, Bilbo Oil Corp. 13.. dry
25-5s- 5 Kraeer, J. D. Loofburrow 1.. dry
30-5s- 5 Davis-Sullivan, Bilbo Oil Corp. 4 75
30-5s- 5 West Rutland Magnolia Pet. Co. 2 75
Davis-Sullivan, Otto Reynolds 2 80

Wells completed 13
Production 358
Dry 6

MUSKOGEE COUNTY

35-15-15 Harrison, J. L. Selby 8 5
8-15-18 Stedham, J. L. Haner 8 180
9-15-18 P. Rentie, C. F. Finefield et al 2 40
Stedham, J. L. Haner 7 ..... dry
Parks, J. R. Parks 1 ..... gas
15-15-18 Lowe, E. A. Hollis et al 1 ... gas
17-15-18 Hewitt, E. Mills et al 1 ..... gas
2-14-19 Johnson, William La Pierre 1-A ..... dry
30-12-19 Drew, Midwestern O. & G. Co. 1 ..... gas
12-15-18 Jobe, G. H. Hanson 1-A ..... dry
13-15-18 Robins, H. E. Williams 1 .... dry
18-15-18 S. Stedham, M. S. Mussellem 1 dry
33-16-15 D. Richards, Mack Drilling Co. 4 5
14-15-15 E. Ware, P. Boyle et al 1... gas
9-15-18 T. Carlina, H. L. Jolly 7..... 165
26-15-19 Anderson, C. D. Bradley 1.. dry
19-14-16 Beams, W. E. Lightner et al 4 20
10-13-18 Schoonover, L. F. Crow 1... dry
9-15-18 Mackey, D.L.T. Co. 5 56
L. Fields, C. F. Finefield et al 1 ..... dry
15-15-18 J. Rentie, J. R. Parks 1 .... gas
16-15-18 W. Bruner, Ray & Berry 1.. dry
35-15-18 Townsite, C. E. Creager trustee 1 40
1-14-18 L. Francis, W. J. Metzger 12 20
3-13-16 J. Dixon, Beard & Elliott 2.. 15
31-12-19 Lacey, Midwestern O. & G. Co. 1 ..... gas

Wells completed 26
Production 546
Dry 9
Gas 7
Gas production 14,650,820

OKFUSKEE COUNTY

24-11-10 Turner, Fern O. & G. Co. 3.. dry
22-11-11 Holmes, Champlin O. & R. Co. 11 ..... dry
26-11-11 Havel, Gene Colvin et al 1.. dry
14-10-11 Micco, Wells et al 1 35
15-11-11 Washington, Champlin O. & R. Co. 9 120
1-10-11 Pinchan, McAdams 4 ..... dry
9-13-10 Davis, Prairie O. & G. Co. 1.. 145

Wells completed 7
Production 300
Dry 4

OKLAHOMA COUNTY

2-11-3w Theimer, Wirt Franklin Pet. Corp. 4 14,619
13-11-3w Trosper, I.T.I.O. Co. 4..... 5,516
14-11-3w E. Trosper, I.T.I.O. Co. 1 9,680
23-11-3w Unsell Krager, I.T.I.O. Co. 2 4,443
24-11-3w Fortson, Mid-Kansas O. & G. Co. 2 ..... gas
25-11-3w Watters, I.T.I.O. Co. 1 ... gas
36-11-3w School Land No. 54, Sinclair O. & G. Co. 9 8,030
School Land No. 54, Sinclair O. & G. Co. 11 17,290
19-11-2w Button, I.T.I.O. Co. 5 ... 12,875
31-11-2w Jones, I.T.I.O. Co. 10 4,317
31-11-2w Hoopes, Tom Slick Oil Co. 7 2,548
2-11-3w Theimer, Wirt Franklin Pet. Corp. 3 2,784
Wright, Wirt Franklin Pet. Corp. 1 5,818
12-11-3w Trosper Park, Cromwell-Franklin Oil Co. 6 11,921
Lowery, Wirt Franklin Pet. Corp. 8 8,884
24-11-3w Olds, Coline Oil Co. 7 2,490
Farley, I.T.I.O. Co. 1 6,408
25-11-3w Clauer, Coline Oil Co. 6.... 5,596
Johnson, I.T.I.O. Co. 5 2,406
36-11-3w School Land No. 67, Sinclair O. & G. Co. 3 15,940
School Land No. 54, Sinclair O. & G. Co. 10 17,220
School Land No. 54, Sinclair O. & G. Co. 13 7,150
Oklahoma State, I.T.I.O. Co. 2 10,481
19-11-2w Fuzzell, I.T.I.O. Co. 3.... 6,301
31-11-2w Venci, Sinclair O. & G. Co. 12 31,290
19-11-2w Hiddleston, Prairie O. & G. Co. and Slick 9 5,619
1-11-3w Community, Mid-Texas Oil Co. 1 19,300
12-11-3w L. Trosper, I.T.I.O. Co. 2 601
Brokaw, A., I.T.I.O. Co. 3 2,855
25-11-3w Clauer, Coline Oil Co. 10.. 4,546
Emmerson-Joyce, I. T. I. O. Co. 2 ..... gas
36-11-3w School Land No. 54, Sinclair O. & G. Co. 14 18,825
31-11-2w Venci, Sinclair O. & G. Co. 11 25,885
1-11-3w Theimer, I.T.I.O. Co. 5... 1,044
13-11-3w A. Brokaw, I.T.I.O. Co. 4 775
14-11-3w Reneimer, I.T.I.O. Co. 1.. 3,755
23-11-3w Donnell, Sinclair O. & G. Co. 1 3,060
25-11-3w Peterson, I.T.I.O. Co. 2... 9,904
36-11-3w School Land No. 54, Sinclair O. & G. Co. 15 7,370
School Land No. 54, Sinclair O. & G. Co. 16 15,545
31-11-2w Sudik, I.T.I.O. Co. 4 16,199
Sudik, I.T.I.O. Co. 7 10,933

Wells completed 42
Production 360,223
Gas 3
Gas production 44,000,000

OKMULGEE COUNTY

9-15-14 D. Tucker, McBrayer et al 1. gas
19-15-14 Harrison, A. W. Cline 8..... 15
14-14-12 Derrisaw, Gray Oil Co. 4.... dry
28-12-14 Gooden, Jordan et al 1..... gas
13-14-14 Rentie "A," Elm Oil Co. 11... 15
7-13-15 Blake, E. J. Lambert 3..... gas
14-14-14 B. Colbert, J. E. Wallace 3.. 25
21-16-11 Hughes, S. J. Mathews 1-A... 10
23-15-11 Bruner, Le Bean Drlg. Co. 7.. 12
18-15-13 L. Doyle, W. B. Pine 1..... dry
23-13-14 H. Myers, F. Sheedy 16..... dry

Wells completed 11
Production 77
Dry 3
Gas 3
Gas production 3,250,000

OSAGE COUNTY

6-26-12 I. T. I. Oil Co. 429..... gas
30-25- 8 The Texas Co. et al 5..... 363
32-24- 9 Peters Pet. Corp. 6..... 10
3-24-11 H. E. Hulen 3..... 5
13-23- 7 Oliphant and The Texas Co. 1. dry
32-22- 8 Wrightsman Pet. Corp. 2..... 17
19-22-11 W. D. Gray 6..... dry
30-21-10 Devonian Oil Co. 5..... gas
5-20-1w Barnsdall Oil Co. 19..... dry
20-29- 9 Winona Oil Co. 15..... 25
22-27-11 I. T. I. Oil Co. 434..... gas
32-25- 9 Carter Oil Co. 3..... dry
7-14- 8 Galt Brown 7..... dry
3-23- 8 I. T. I. Oil Co. 431..... gas
30-21-10 Okla. Nat. Gas Corp. 1,793.... gas
17-27- 6 Peters Pet. Corp. 13..... dry
22-27-11 I. T. I. Oil Co. 434..... gas
8-25- 9 Peters Pet. Corp. et al 1..... dry
6-24- 9 I. T. I. Oil Co. 409..... gas
18-22-10 Mid-Co Oil Co. 23..... 10

Wells completed 20
Production 330
Dry 7
Gas 7
Gas production 12,250,000

PAWNEE COUNTY

30-21- 9 Johnson, John Byrnes 9..... 30
27-23- 4 Vaugh, J. L. Donahue 1..... gas
6-20- 8 Little, I. T. I. Oil Co. 10..... 234
35-20- 9 Smelzer, Swift et al 5..... 10
20-20-10 Tillock, Mooney et al 1..... dry
14-20- 9 Mote, Thompson & Black 2-A. gas

Wells completed 6
Production 274
Dry 1
Gas 2
Gas production 14,000,000

POTTAWATOMIE COUNTY

8-9-5 Townsite, Stogner et al 1..... 440
Townsite, Burns et al 1..... 548
22-6-3 Archer, Twin State Oil Co. 1...3065
23-6-3 Butler, I. T. I. Oil Co. 2.....1930
Tomlin, Prairie O. & G. Co. 1..4915
7-9-5 Alford, Superior Oil et al 1.... 550
22-6-3 Townsend, J. A. Hull 1..... 886
Archer, Twin State Oil Co. 2...1080
23-6-3 Warren, Wilcox O. & G. Co. 2.. 841
22-6-3 Miller, Transcontinental Oil 1..1927

Wells completed 10
Production 16,182

SEMINOLE COUNTY

24- 9-5 Miller, Sinclair O. & G. Co. 2.. 490
25- 9-5 Gates, Amerada Pet. Corp. and Wilcox O. & G. Co. 1..... 30
19- 9-6 Taylor, Gypsy Oil Co. 6..... 350
30- 9-6 Sandefur, Magnolia Pet. Co. 1.. dry
16- 6-6 Roberts, McCulloch Oil Co. 3... 40
Charty, W. B. Pine 2..... 960
20- 6-6 Chupco, Harris et al 2..... 205
Cheparney, W. B. Pine 1..... 600
Cheparney, W. B. Pine 2..... 685
21- 6-6 Burgess, Harris et al 2.....1790
32-10-6 Crump, Shell Pet. Corp. 1..... 123
22- 9-5 Edwards, Amerada Pet. Corp. et al 4 1580
Edwards, Amerada Pet. Corp. et al 5 4290
Anderson, Eason Oil Co. 1....5025
23- 9-5 Grounds, Amerada Pet. Corp. 5.6870
24- 9-5 Maguire, Continental Oil Co. 4.. 280
13- 7-6 Factor, Barnsdall Oil Co. 3.... 80
Wood, Independent O. & G. 2.. 200
4- 7-7 Scipio, Magnolia Pet. Co. 2.... 200
5- 7-7 Phillips, Sinclair O. & G. 12... 240
16- 7-8 Hayes, Magnolia Pet. Co. 1.... gas
19- 7-8 Fish, Empire O. & R. Co. 1-C.. dry
17- 6-6 Johnson, Barnsdall Oil Co. 4...4995
20- 6-6 Chupco, Hilton Phillips et al 1.3650
P. Harjo, Mid-Cont. Pet. 2 2795
P. Harjo, Mid-Cont. Pet. 5 2110
P. Harjo, Mid-Cont. Pet. 6 800
21- 6-6 Amey, Prairie O. & G. Co. and T. B. Slick 1 ..... dry
29- 6-6 Caesar, Prairie O. & G. Co. 1..1065
24- 5-7 Wyetka, Prairie O. & G. Co. 2.... gas
13- 5-7 Lusty, Barnsdall Oil Co. 4..... 210
23- 5-7 Peters, Gypsy Oil Co. 5..... 2310
30-10-6 Cheparney, Carter Oil Co. and Denver Prod. & Ref. Co. 1.. dry
24- 9-5 Miller, Gypsy Oil Co. 1..... 400
20- 9-6 Campbell, Carter Oil Co. 4..... 270
13- 7-6 S. Factor, Barnsdall Oil Co. 2. 535
23- 7-6 Aleck, Mid-Cont. Pet. Corp. 4.. 20
4- 7-7 Harris, Continental Oil Co. 9...1037
5- 7-7 Smith, Mid-Cont. Pet. Corp. 19 635
19- 7-8 R. Fish, Empire O. & R. 2.... gas
16- 6-6 Louisiana, Gypsy Oil Co. 1..... dry
20- 6-6 Chupco, Hilton Phillips et al 2.1903
29- 6-6 Deavers, Magnolia Pet. Co. 1.. dry
Burgess, Hilton Phillips et al 3 3535
19- 9-6 Chowning, Carter Oil Co. 6.... 400
10- 8-5 Blankenship, Culbertson et al 1 dry
30- 8-8 Johnson, Deep Rock Oil 1..... 112
16- 6-6 Okfuskee, Independent O. & G. Co. 5 90
20- 6-6 P. Harjo, Mid-Cont. Pet. Corp. 3 15000
P. Harjo, Mid-Cont. Pet. Corp. 4 4515
21- 6-6 Caesar, Empire O. & R. Co. 1.. gas
31- 6-8 Sakteka, Magnolia Pet. Co. 1.. dry
W. Palmer, Magnolia Pet. Co. 1 ..... dry

Wells completed 53
Production 70,433
Dry 9
Gas 4
Gas production 93,900,000

STEPHENS COUNTY

27-1s- 8w Wilkinson "B," Pearce & Brown 1 ..... gas
1-2s- 8w Dare, Kidney et al 2 ..... dry
12-2s- 8w Massey, Owenwood Oil Co. 12 20
3-1s- 8w Wade, Sykes et al 1 ..... dry
19-1s- 8w Adams, John Fossett 4 ..... gas
20-2s- 7w Wilson, Geo. Pace et al 2 ... dry
Wilson, Geo. Pace et al 3 ... dry
28-2s- 7w Duncan, Simms Pet. Co. 1 ... dry
26-1s-10w School land, Wirt Franklin Pet. Corp. 3 15

Wells completed	9
Production	35
Dry	5
Gas	2
Gas production	6,900,000

WAGONER COUNTY

21-19-16 Belcher, H. L. Hollingsworth 1 dry
13-19-16 Childers, C. A. Buzzard 1 .... dry
15-18-16 Burgess, Castle et al 1 ..... dry
12-18-17 Cowans, Brasheers et al 1 .... dry
26-18-15 Drew, J. E. Martin 1 ..... dry
13-17-16 Jackson, Bryan Pet. Co. 1 .... gas
11-18-17 W. Kanard, R. L. North 3 .... gas

Wells completed	7
Dry	5
Gas	2
Gas production	8,333,000

MISCELLANEOUS COUNTIES

Caddo County—
31-6-9w Gregory, Magnolia Pet. Co. 4 . 75
Jones, Mid-Kans. O. & G. and Ramsey Pet. 4 46
Cleveland County—
4-10-2w Sudik, Continental Oil 1 12,713
Comanche County—
29-2-9w Indian, Voe Wright 1 ..... dry
Latimer County—
23-5-18 Shaw, Limestone O. & G. Co. 1. gas
Grady County—
21-3-5w Carter-Kerans, Carter Oil 6 .... dry
30-4-7w Haynes, Meridian Gas Co. 1 .... gas
Kay County—
3-26-3 Hinkle, Wagoner Pet. Co. 1 .. dry
9-27-1w Brown, Harris & Haun 3 15
Jefferson County—
9-2s-6w Spain, Wirt Franklin Pet. 3 .. dry
17-7s-5w Bushby, McGinley & Sigler 1. 6
33-6s-5w O. W. Seay, Kile & Wylie 1 .. dry
10-7s-5w Riverbed, Sutherland Oil 2 50
Kiowa County—
4-6-16w Menton, McWirter et al 2 .... dry
Payne County—
21-19-5 Dawes, Deep Rock Oil Corp. 1-A 100
20-19-5 Davis, Twin State Oil Co. 1 40
McIntosh County—
3-12-15 Hardin, T. C. Young et al 1.. dry
35-12-17 J. Wolfe, N. J. Welble 1..... gas
J. Wolfe, N. J. Welble 2..... dry
Grant County—
2-27-3w Webb, Continental Oil et al 3 gas
14-27-3w Howell, Argo Oil Co. 2..... 35
Pittsburg County—
33-7-16 Williams, Empire O. & R. 1... dry
10-7-18 Bascom, Central State Light & Power Co. 1 ..... gas
Bascom, Midwestern O. & G. 1 gas
Noble County—
28-22-1w Bergstram, Gypsy Oil et al 1. dry
15-21-2w Sams, Magnolia Pet. Co. 4 .. 150
Pontotoc County—
30-5-5 Norris, Benedum & Trees Oil 1.. 112
28-5-5 Stannitt, Benedum & Trees 1.... 90
32-5-5 Roper, Dixie Oil Co. 2..... 120
Tulsa County—
5-16-14 Brown, L. E. Lockhart 1..... dry
8-19-10 Smith, Vensel & Elliott 7..... 10
8-19-11 Fisher, Operators Oil Co. 4... dry
10-19-10 Brightman, Pure Oil Co. 2.... 100
Washita County—
10-9-20w Music, Southern Inv. Co. 1... dry

Wells completed	34
Production	13,752
Dry	13
Gas	6
Gas production	93,050,000

KANSAS FIELDS

Monthly Summaries

Summary of Completed Wells

County—	Comp.	Prod.	Dry	Gas
Butler	6	100	4	..
Cowley	2	120	..	..
Greenwood	17	1,431	7	1
McPherson	15	9,176	2	..
Sumner	5	1,632	3	..
Sedgwick	2	1,232	..	..
Miscellaneous	23	1,247	16	..
Total July	70	14,938	32	1
Total June	105	25,592	37	16
Difference	35	10,654	5	15

Summary of Wells Drilling

County—	Rigs	Drlg.	Ttl.
Barton	..	1	1
Barber	..	5	5
Butler	3	23	26
Chase	..	2	2
Chautauqua	2	1	3
Clark	..	1	1
Clay	..	1	1
Coffey	1	4	5
Cowley	3	12	15
Dickinson	..	2	2
Douglas	..	1	1
Edwards	..	2	2
Elk	2	4	6
Ellis	1	7	8
Ford	..	2	2
Geary	..	1	1
Greenwood	3	23	26
Gove	..	1	1
Graham	..	2	2
Grant	..	1	1
Harper	..	1	1
Harvey	1	..	1
Kingman	1	..	1
Kiowa	..	2	2
Lyon	..	1	1
McPherson	3	13	16
Marion	1	4	5
Morris	2	3	5
Morton	2	17	19
Norton	1	..	1
Osage	..	1	1
Pawnee	..	2	2
Pratt	..	1	1
Reno	..	6	6
Rice	1	19	20
Rooks	1	3	4
Rush	2	4	6
Russell	2	10	12
Saline	..	1	1
Scott	1	..	1
Sedgwick	2	13	15
Sheridan	..	1	1
Stafford	..	3	3
Stevens	5	15	20
Sumner	1	11	12
Trego	..	1	1
Wallace	..	1	1
Washington	..	1	1
Woodson	1	6	7
Total July	42	236	278
Total June	60	307	367
Difference	18	71	89

WELLS COMPLETED

BUTLER COUNTY

26-23-4 Hopkins, Elam et al 1 ..... dry
25-23-4 Fowler, J. H. Elam et al 1 .... dry
35-28-6 Lehman, Ramsey et al 2 ..... dry
19-26-5 Koogler, Empire O. & R. Co. 98 80
11-28-5 Crawley, Empire O. & R. Co. 1 dry
24-27-4 Rutherford, P. W. Y. Oil Co. 2 20

Wells completed	6
Production	100
Dry	4

COWLEY COUNTY

31-36-6 Ewers, the Prairie O. & G. Co. 1 20
19-31-6 Headley, Lewis Prod. and Shell Pet. Corp. 1 100

Wells completed	2
Production	120

GREENWOOD COUNTY

27-22-11 Wick, National Refg. Co. 10 .. dry
36-23-11 Patterson "C," Empire O. & R. Co. 9 125
35-24-10 Wilcox, Independent O. & G. Co. 1 ..... dry
36-24-10 Mack "B," McGinnis et al 4 .. 300
1-24-11 Newhouse, the Prairie O. & G. Co. 5 346
29-22-13 Blanck, The Texas Company 2 25
34-22-11 Hess, O'Neil et al 2 125
27-23-10 Thrall, Independent O. & G. Co. 1 ..... dry
17-24-12 Scott, Titus et al 1 ..... dry
16-25-11 Carter, Eureka Oil Co. 1 ..... dry
27-22-11 Wick, Skelly Oil Co. and Tidal Oil 22 90
32-22-13 Luthi, Simmons & Leonard 1 dry
36-24-10 Mack "B," McGinnis et al 5 .. 200
Jones, Aladdin Pet. Co. and Phillips Pet. Co. 3 200
25-24-12 Beavers, Derby Oil Co. 2 .... dry
Beavers, Derby Oil Co. 4 ..... gas
22-22-12 Frankhouser, Theta Oil Co. 9.. 20

Wells completed	17
Production	1431
Dry	7
Gas	1
Gas production	1,250,000

McPHERSON COUNTY

34-20-3w Kinney, Gypsy Oil Co. 2 546
4-21-3w Krehbiel, W. C. McBride, Inc. 2 565
Krehbiel, Barnsdall Oil Co. 5..1205
Morehouse, Sinclair O. & G. Co. 4 526
9-21-3w Voshell, Mid-Kansas O. & G. Co. 8 1395
10-19-2w Robinson, McPherson O. & G. Dev. Co. et al 1 190
30-19-1w Whitwright, W. C. McBride, Inc. 1 50
4-21-3w Morehouse, Sinclair O. & G. Co. 6 900
11-20-3w Decker, Milmac et al 1-A .... dry
33-20-3w McCurdy, Sinclair O. & G. Co. 1 972
4-21-3w Morehouse, Sinclair O. & G. Co. 10 1365
33-20-3w J. Stucky, Gypsy Oil Co. 1.... dry
E. Stucky, Gypsy Oil Co. 2.... 340
3-21-3w Morehouse, Independent O. & G. Co. 2 650
9-21-3w Stucky, Derby Oil Co. 5 473

Wells completed	15
Production	9176
Dry	2

SUMNER COUNTY

9-30-2w Latta "B," Champlin O. & R. Co. 6 ..... dry
27-34-2 Norrish, Shawver and Continental Oil Co. 2 ..... dry
26-33-3w Clift, Blackwell O. & G. Co. et al 1 ..... dry
23-32-2 Weinrich, Lario et al 13 82
16-35-3w Enderud, Gypsy Oil Co. 2 1550

Wells completed	5
Production	1632
Dry	3

SEDGWICK COUNTY

1-26-1w Bright, Wentz Oil Corp. 1-A.. 105
19-27-2 Trustee, Fisher & Lauck 2 ..1127

Wells completed	2
Production	1232

MISCELLANEOUS COUNTIES

Barber County—
13-34-15w Temple, Skelly Oil Co 1 .... dry
Barbara County—
7-33-12w Alexander "B," Barbara Oil Co. 1 ..... dry
Chase County—
27-18-6 Lipps, Urschell et al 1 ..... dry
31-19-8 Cook, Steinbuchel et al 1 ..... dry
Chautauqua County—
12-32-10 Curran, Griffith & Bell 2 40
2-33- 9 Patterson, Valentine et al 1... dry
Coffey County—
11-22-13 Mosser, Staats et al 1 ..... dry
13-23-14 Scott, Selby O. & G. Co. 4.... dry
23-22-13 Eppinger, Selby & Nolan 1 .... dry
Dickinson County—
31-13-3 Heuner, Bryan & Emery, Inc. 1 ..... dry
Ellis County—
32-11-17w Ruth, Phillips Pet. Co. 1 .... dry
5-12-17w Horn, Phillips Pet. Co. 1.... 590
Elk County—
36-30-9 Williams, the Prairie O. & G. Co. 1 ..... dry
28-31-10 Rettig, Exchange Drlg. Co. 1.. dry
Harvey County—
26-22-3w Shives, Gypsy Oil Co. 1 ..... dry
Lyon County—
1-20-10 Pyle, Sheedy et al 1 ..... dry
Marion County—
10-17-4 Riffel, Youkers et al 2 75
17-21-4 Reamey, National Refg. Co. 16 150
Reno County—
31-25-4w Doles, Sinclair O. & G. Co. et al 1 ..... dry
17-25-4w Tonn, Tatlock and Shell Pet. Corp. et al 1 292
Rooks County—
11-9-16w Tatkenhorst, Krueger et al 1 40
Russell County—
5-15-14w Maier, E. W. Marland, Inc. 1.. 60
Saline County—
9-16-3w Miller, Dixie Oil Co. 1 ..... dry

Wells completed	23
Production	1247
Dry	16

SOUTHWEST TEXAS

SUMMARY OF FIELD OPERATIONS

	Comp.	Prod.	Dry	Gas	Rgs.	Dlg.	Ttl.
Mirando	52	6,965	9	5	25	39	64
Darst Creek	7	1,250	4	0	6	5	11
Buchanan	1	0	1	0	1	0	1
Bruner	4	3,425	0	0	0	0	0
Dobrowolski	1	6	0	0	3	1	3
Pettus	9	5,030	1	0	25	17	42
Lasater	1	0	0	1	0	1	1
Agua Dulce	1	10	0	0	1	3	4
Miscellaneous	27	5	25	1	56	85	141
Ttl. July	102	16,691	40	7	116	151	267
Ttl. June	63	22,472	28	5	93	134	227
Difference	39	5,781	12	2	23	17	40

WELLS COMPLETED

COLE POOL—DUVAL COUNTY

R. Benavides, Cole Pet. Co. 69 ..... abd
Benavides, John J. O'Hern 1 ..... abd
Kohler, Humble Oil & Ref. Co. 41..... abd
Kohler, Humble Oil & Ref. Co. 46..... gas
Kohler, Humble Oil & Ref. Co. 47..... 10

ALBERCAS POOL—WEBB COUNTY

Bruni, O. W. Killam 2 ..... abd
Yaeger-Strohman, Sun Oil Co. 14 25

CAROLINA-TEXAS—WEBB COUNTY

Webster, E. D. Claggett and Sam Evans 1 100

COLE POOL—WEBB COUNTY

R. Benavides, French Oil Corp. No. 1 "B" 75
A. Benavides, Magnolia Pet. Co. 2 100
A. Benavides, Magnolia Pet. Co. 3 40
C. Benavides, Magnolia Pet. Co. 4 85
Montemayor, S. R. C. Co. (Trinity Drillers) 1 75

JENNINGS-CUELLAR—ZAPATA COUNTY

Cuellar, O. W. Killam (Killam-Duggan) "C" 18 ..... abd
Cuellar, O. W. Killam "B" 20 200
Cuellar, O. W. Killam "C" 21 300
Cuellar, O. W. Killam 24 100

JENNINGS-MUCKELROY—ZAPATA COUNTY

M. Garza, Arnold & Ahler 1 100
Trevino, Alamo Drlg. & Lsg. Co. (Blair) 3 100
Trevino, Alamo Drlg. & Lsg. Co. (Blair) 2 75
Trevino, Alamo Drlg. & Lsg. Co. (Claggett) 1 75
Trevino, Alamo Drlg. & Lsg. Co. (Claggett) 2 75
Trevino, Allied Gas Co. 3 "A" ..... abd
Trevino, Allied Gas Co. "A" 2 "a" 125
Trevino, Allied Gas Co. 4 "A" 150
Trevino, Allied Gas Co. "A" 5 150
Trevino, Allied Gas Co. "A" 6 400
Trevino, Allied Gas Co. "A" 7 100
Trevino, Allied Gas Co. "A" 8 75
Garza, R. F. Blankenship 2 ..... abd
Montemayor, Blankenship & Nix 1 50
Trevino, A. L. Edgington 4 2400
Trevino, A. L. Edgington 5 325
Trevino, Edgington & Niles 1 "B" .... gas
Trevino, Edgington & Niles 2 "B" .... gas
Cuellar, O. W. Killam 23 ..... abd
Trevino, H. Muckelroy, Jr. 3 100
Gutierrez, Nordan & Morris-Morris & Allen 1 75
Gutierrez, Nordan & Morris-Morris & Allen 1 350
E. C. Bustamente, Nordan & Morris-Grimm & Yakey 1 100
Trevino, Nordan & Morris 2 "A" 225
Martinez, South Texas Prod. Co. 2 .... gas
E. Gutierrez, W. R. Shankle 2 130
Trevino, W. R. Shankle 2 125
Trevino, S. R. C. Co. (Trinity Drillers) 2 "A" 65
Cuellar, S. R. C. Co. 2 "B" 150
Cuellar, S. R. C. Co. 3 "B" 100
Cuellar, S. R. C. Co. 4 "B" 100
Cuellar, S. R. C. Co. 6 "B" 65
Cuellar, S. R. C. Co. 7 "B" ..... gas
Cuellar, S. R. C. Co. 8 "B" 70

Wells completed	52
Production	6965
Dry	9
Gas	5
Gas production	8,9,000,000

DARST CREEK—GUADALUPE COUNTY

Dowdy, Empire Gas & Fuel Co. 3 ..... abd
Bibb, Dilworth Hager 1 ..... abd
Knodle, Magnolia Pet. Co. 2 500
Rand Miller, Magnolia Pet. Co. 3 150
Richburg, Magnolia Pet. Co. 3 600
Roamel, Penn-Tex Oil Co. 1 ..... abd
Goldman, Trinity Drillers 1 ..... abd

Wells completed	7
Production	1250
Dry	4

BUCHANAN POOL—CALDWELL COUNTY

Geoffery, Ed. Lange et al 1 ..... abd

BRUNER POOL—CALDWELL COUNTY

Briscoe, Gulf Prod. Co. 3 100
Briscoe, Gulf Prod. Co. 4 700
C. F. Dye, Eastland Oil Co. 1 2500
New, Humble Oil & Ref. Co. 5 125

Wells completed	4
Production	3425

DOBROWOLSKI POOL—BEXAR COUNTY

Sandemer, Eckert & Son 6 6

PETTUS AREA—BEE COUNTY

Roberts, Barnsdall Oil Co. 1 500
Burnett, Batex Pet. Co. 1 250
McKinney, Cosden Oil Co. 2 2080
McKinney, Humble Oil & Ref. Co. 4 .. 500
Newman, Houston Oil Co. 1 300
Beasley, Houston Oil Co. 1 300
Roberts, Trinity Drillers 1 ..... abd
Ray, Union Prod. Co. 14 600

Wells completed	8
Production	5030
Dry	1

LASATER POOL—BROOKS COUNTY

Holbein-Wormser, Houston Oil Co. 1.... gas

AGUA DULCE POOL—NUECES COUNTY

Donnegan, Saxet Oil Co. 1 10

MISCELLANEOUS WILDCATS

Atascosa County—
Boynton, Frontier Oil Co. 1 ..... abd
Bexar County—
Cassiano, Louis Wentz et al 1 ..... abd
Bastrop County—
Spooner, Pacific Oil & Gas Co. 2 .... abd
Caldwell County—
Williams, Hinton et al 1 ..... abd
McNeal, Ken & Malcolm 1 ..... abd
De Witt County—
Weisgarver, Russell & Slick 1 ..... abd
Kleavermann, Louisiana Oil Ref. Co. 1.. abd
Von Roeder, Gibson & McIntyre 1 .... abd
Fayette County—
Kerr, Muldoon Oil Co. 1 ..... abd
Manton, Hoffer-Stanton 1 ..... abd
Goliad County—
Perrira, Wm. F. Morgan & Tidal Oil Co. 1 ..... abd
Guadalupe County—
Denman, Adams & Lyles 1 ..... abd
Hartwig, Hadley et al 1 ..... abd
Karnes County—
Boyce, Moody-Seagraves-Morgan 1 .... abd
Matula, Hewitt et al 1 ..... abd
Wilburn, Mundine Inv. Co. 1 ..... abd
Porter, Hewitt et al 1 ..... abd
Live Oak County—
Dougherty, Dougherty et al 1 ..... abd
Medina County—
Irrigated Farms, Lynko Oil & Gas Corp. 1 ..... abd
Mofield, Sunflower Oil Co. 1 5
Fusselman, Kirby Pet. Co. 1 ..... abd
Nueces County—
Lawrence-Harrell, Thompson et al 1 ... abd
Victoria County—
McFadden, Lion Oil Ref. Co. 1 ..... gas
Webb County—
W. C. Billings, O. W. Killam 8 ..... abd
Willacy County—
Elmore, Wimer-Richardson 1 ..... abd
Zavala County—
Washer, Southern Crude Oil Pur. Co. 1 abd
Washer, Faith Baldwin 1 ..... abd
Price, Jack Baldwin 1 ..... abd

Wells completed	27
Production	5
Dry	25
Gas	1
Gas production	40,000,000

PANHANDLE FIELDS

Summary of Wells Completed

County—	Comp.	Prod.	Dry	Gas
Carson	12	1,936	0	4
Gray	29	9,200	0	5
Hutchinson	1	100	0	0
Moore	1	0	0	1
Potter	1	0	0	1
Wheeler	9	60	1	7
Total July	53	11,346	1	18
Total June	65	23,038	5	19
Difference	12	11,692	4	1

Summary of Rigs and Wells Drilling

County—	Rigs	S.D.	Drlg.	Ttl.
Carson	3	8	12	20
Gray	17	15	69	101
Hutchinson	5	6	20	31
Moore	0	0	5	5
Wheeler	5	2	7	14
Miscellaneous counties	2	7	6	15
Total July	31	36	119	186
Total June	43	32	120	195
Difference	12	4	1	9

WELLS COMPLETED

CARSON COUNTY

J. W. Eller, Cockrell-McIlroy Oil Co. 1. gas
B. F. Block, Continental Oil Co. 3 110
B. F. Bynum, Danciger O. & R. Co. 1.. 150
W. F. Simms, Cockrell-McIlroy Oil Co. 1 gas
J. L. Noel, Prairie Oil & Gas Co. 3 370
B. F. Block, British American Oil Co. 1 150
B. F. Bynum, Danciger O. & R. Co. 3.. 450
S. B. Burnett, Empire G. & F. Co. 24... gas
J. W. Fields, Empire G. & F. Co. 2..... 200
Percival, Osborne et al 3-A..... 260
Percival, Washoma O. & R. Co. and Shell Pet. Corp. 1 296
J. Whittemore, Empire Gas & Fuel Co. 1 gas

Wells completed	12
Production	1986
Gas wells	4
Gas production	79,500,000

GRAY COUNTY

Shaw (Humphreys), Danciger O. & R. Co. 1 ..... gas
J. S. Morse-A, Nabob Oil Co. 2 75
J. B. Bowers, Operators Oil Co. 1 20
W. C. Archer, The Texas Company 2 ... 144
Cook-Faulkner, The Texas Company 9 .. 2516
J. E. Wright, The Texas Company 4 ... 873
A. Chapman-A, The Texas Company 8 .. 385
McLarty-Lester-A, The Texas Company 7 185
J. S. Morse-A, Tripplehorn Oil Co. 1 .. 75
E. Hexter, Empire Gas & Fuel Co. 2 ... gas
J. B. Bowers, The Texas Company 15 ... 825
Combs & Worley, Wilcox-Pampa Oil Co. 16 507
J. S. Morse, Lyon et al 2 150
A. Chapman-C, Shamrock O. & G. Co. 3 410
W. E. Melton, Baldridge & Lilly 1 25
J. J. Wall, Empire Gas & Fuel Co. 2 .... gas
P. Young, Humble O. & R. Co. 1 ..... gas
A. Combs et al, Gulf Prod. Co. 4 45
W. C. Archer, McIlroy Oil Co. 2 275
M. L. Langham, Mid-Continent Pet. Corp. 2 1350
A. Combs et al, Gulf Prod. Co. 3 ..... gas
J. M. Saunders, trustee-A, Gulf Prod. Co. 5 550
J. M. Carpenter, Vulcan Oil & Gas Co. 1 5
Cook-Faulkner, Champlin & Danciger 7 100
C. W. Bradford, J. H. Lenix et al 1 ... gas
P. A. Worley et al (Leycomb), Prairie O. & G. Co. et al 5 250
Combs & Worley, The Texas Company 9 250
J. E. Wright, The Texas Company 6 ... 50
Combs & Worley, Wilcox-Pampa Oil Co. 17 135

Wells completed 29
Production 9200
Gas wells 5
Gas production 122,060,000

HUTCHINSON COUNTY

J. L. Moore, Holmes Bros. 1 100

MOORE COUNTY

Lee Bivins, Fritch Oil & Gas Co. 1 ..... gas

Gas production 50,000,000

POTTER COUNTY

R. B. Masterson, Texas Inst. P. L. Co. 1 gas

Gas production 47,000,000

WHEELER COUNTY

Upham Gas Co. (George), Upham Gas Co. 3 ..... gas
J. A. Worley, Dunaway Bros. 1 60
I. Close, Murchison & Fain 16 ..... gas
I. Close, Murchison & Fain 17 ..... dry
C. Hicks-Martin, Lone Star Gas Co. 2 .. gas
A. B. Pike, J. A. Murphy 1 ..... gas
G. R. Reneau, H. R. Anderson 1 ..... gas
W. L. Cooper, Lone Star Gas Co. 1 ..... gas
I. Close, Murchison & Fain 18 ..... gas

Wells completed 9
Production 60
Dry holes 1
Gas wells 7
Gas production 141,000,000

WEST TEXAS FIELDS

Summary of Wells Completed

County—	Comp.	Prod.	Dry	Gas
Crane	7	1,213	1	0
Culberson	4	0	4	0
Ector	13	6,857	0	0
Glasscock	9	6,431	2	0
Howard	2	227	0	0
Irion	3	175	1	0
Midland	1	0	1	0
Pecos	15	41,203	3	0
Taylor	2	0	2	0
Ward	1	230	0	0
Winkler	2	564	0	0
Total July	59	56,900	14	0
Total June	60	15,938	14	0
Difference	1	40,962	0	0

Summary of Rigs and Wells Drilling

County—	Rigs	S.D.	Drlg.	Ttl.
Crane	7	0	12	19
Crockett	2	3	1	6
Ector	2	5	16	23
Fisher	0	1	5	6
Glasscock	0	0	9	9
Howard	5	7	5	17
Irion	2	3	3	8
Jones	0	1	1	2
Pecos	14	7	31	52
Reagan	0	0	9	9
Upton	1	1	4	6
Ward	3	4	10	17
Winkler	0	1	5	6
Miscellaneous counties	9	44	47	100
Total July	45	77	158	280
Total June	46	76	148	270
Difference	1	1	10	10

WELLS COMPLETED
CRANE COUNTY

Cowden Bros. & Co., Section 31, C. C. Duffey 1 ..... dry
University-Collett, Church & Fields 2 .. 300
J. T. McElroy, Gulf Prod. Co. 76 250
University-E, Simms and Atlantic 2 ... 288
J. T. McElroy, Gulf Prod. Co. 77 80
J. T. McElroy, Gulf Prod. Co. 78 180
State-L. E. Lasseter, Gulf Prod. Co. 1 115

Wells completed 7
Production 1213
Dry holes 1

CULBERSON COUNTY

W. D. Garren, Grisham-Hunter 1 ..... dry
Miller, Scott & Dittman 1 ..... dry
C. O. Finley, Hickey & Stevens 1 ..... dry
McGregor, West Coast Oil & Expl. Co. 1 dry

Wells completed 4
Dry holes 4

ECTOR COUNTY

University-B, Amerada Pet. Corp. et al 2 417
University-C, Cosden Oil Co. 1 481
W. E. Connell-B, trustee-A, Gulf Prod. Co. 1 325
R. L. York, Humble Oil & Ref. Co. et al 8 100
University, Simms Pet. Co. et al 2 1200
Kloh & Rumsey, Cosden Oil Co. 3 500
State, Gulf Prod. Co. 3 450
State-A, Gulf Prod. Co. 3 527
University-B, Amerada Pet. Corp. et al 1 802
University-B, Cosden Oil Co. 4 692
University-S, Landreth Prod. Corp. 4 .. 792
University, Transcontinental Oil Co. 1 .. 231
R. L. York, Humble O. & R. Co. et al 9 340

Wells completed 13
Production 6857

GLASSCOCK COUNTY

J. J. Phillips, Kirby Pet. Co. et al 3 ..1200
R. C. Coffee-B, Lion Oil Ref. Co. 1 ... 800
J. M. Sprinkles, F. H. E. Oil Co. 1 ..... dry
J. J. Phillips, Kirby Pet. Co. et al 2 ...1208
R. C. Coffee, Simms Pet. Co. 5 750
C. F. Jones, California Co. 1 ..... dry
Dora Roberts-C, F. H. E. Oil Co. 3 ... 25
J. W. Baker, Kirby Pet. Co. et al 6 ...1536
J. W. Baker, California Co. 2 912

Wells completed 9
Production 6431
Dry holes 2

HOWARD COUNTY

Dora Roberts, Merrick-Bristow Oil Co. 9 130
Dora Roberts, Ward Oil Co. 19 97

Wells completed 2
Production 227

IRION COUNTY

J. M. Nutt, Straughn and Texannati Oil Co. 2 105
J. M. Nutt, C. Cromwell et al 3 70
J. D. Sugg, Kingwood Oil Co. 1 ..... dry

Wells completed 3
Production 175
Dry holes 1

MIDLAND COUNTY

J. E. Hutt, Pure Oil Co. 1 ..... dry

PECOS COUNTY

Mrs. F. E. Toborg, Cardinal Oil Co. 9 .. 15
J. M. Holmes, Mauch & Kroger 1 ..... dry
Mrs. M. A. Smith-A, Simms Pet. Co. 6 64
J. H. Tippett-A, Southern Crude Oil Pur. Co. 7 60
J. H. Tippett-A, Southern Crude Oil Pur. Co. 10 196
I. G. Yates, Lease 1, Section 34, California Co. 21 2760
M. A. Smith et al, trustee-B, Gulf Prod. Co. 25 8064
I. G. Yates, Gulf Prod. Co. 32 21,264
J. H. Tippett, Dixie Oil Co. 3 40
F. A. Perry, Transcontinental Oil Co. and Arkansas F. O. Co. 2 60
R. D. Webb, Fisher & Lowery 1 ..... dry
V. B. Wright Est., The Texas Company et al 1 ..... dry
University-A, Continental Oil Co. 7 ... 150
H. J. Eaton, Southern Crude O. P. Co. 2 130
I. G. Yates, Lease 1, Section 34, California Co. 22 8400

Wells completed 15
Production 41,203
Dry holes 3

TAYLOR COUNTY

Stokes, Condor Pet. Co. 1 ..... dry
A. V. Teaff, Eastland Oil Co. and Dunnigan 1 ..... dry

WARD COUNTY

G. W. O'Brien et al, Gulf Prod. Co. 8.. 230

WINKLER COUNTY

W. F. Scarborough, Shell Pet. Corp. et al 8 39
T. G. Hendrick, Prairie Oil & Gas Co. 1 (second completion) 525

Wells completed 2
Production 564

EAST CENTRAL TEXAS

Summary of Field Operations for July

County—	Comp.	Prod.	Abd.	Gas	Rgs.	Dlg.	Ttl.
Anderson	3	21	2	0	0	2	2
Angelina	0	0	0	0	1	0	1
Delta	0	0	0	0	0	1	1
Ellis	0	0	0	0	0	2	2
Freestone	0	0	0	0	0	2	2
Gregg	0	0	0	0	1	0	1
Grimes	1	0	1	0	0	0	0
Henderson	0	0	0	0	1	2	3
Limestone	1	0	1	0	0	1	1
Madison	1	0	1	0	0	0	0
Morris	0	0	0	0	0	1	1
Navarro	2	30	1	0	0	3	3
Rains	0	0	0	0	0	1	1
Rusk	0	0	0	0	0	2	2
Smith	0	0	0	0	0	1	1
Van Zandt	17	70,500	2	0	3	10	13
Woods	2	0	2	0	0	2	2
Ttl. July	27	70,551	10	0	7	29	36
Ttl. June	26	65,000	12	0	12	39	51
Difference	1	5,551	2	0	5	10	15

WELLS COMPLETED
ANDERSON COUNTY

Boggy Creek-Todd, Humble O. & R. 5-A 21
Keechi-Allison-Gardner, Sun Oil Co. 1.. abd
Saline Lake-Bowers-Maier, Sun Oil Co. 2 abd

HENDERSON COUNTY

Stephenson, Shell Pet. Corp. 1..... abd

LIMESTONE COUNTY

Powell, Jansen & Baggett 2..... abd

MADISON COUNTY

Fuhlberg, Indian Pet. Co. 1..... abd

NAVARRO COUNTY

Bush, O'Byrne et al 1..... 30
Longbotham, Tidal Oil Co. 1..... abd

VAN ZANDT COUNTY

Mrs. E. E. Carroll, Humble O. & R. 1..1500
W. F. Swain, Pure Oil Co. 1..... 5500
J. A. Bracken, Pure Oil Co. 1..... 4000
J. A. Bracken, Pure Oil Co. 2..... 3500
M. R. Bolin, Pure Oil Co. 2..... 3000
A. D. Clark, Pure Oil Co. 1..... 4000
R. E. Collett, Pure Oil Co. 1..... 2000
D. R. Howell, Pure Oil Co. 2..... 7500
J. J. Murphee, Pure Oil Co. 2..... 3500
E. V. Tunnell, Pure Oil Co. 1..... 3500
Tunnell, Pure Oil Co. 5..... 6000
R. L. Wells, Pure Oil Co. 4..... 3000
R. L. Wells, Pure Oil Co. 6..... 3000
R. L. Wells, Pure Oil Co. 7..... 3000
B. M. Fowler, Shell Pet. Corp. 1..... 6000
T. J. Wallace, Sun Oil Co. 1..... 6000
R. V. White, The Texas Co. 1..... 6000

WOODS COUNTY

Dickey, Joe Pace et al 1..... abd
Perrin, The Texas Co. 1..... abd

Total completions 27
Production 71,551
Abandoned 8

NORTH CENTRAL TEXAS

Summary of Wells Completed

County—	Comp.	Prod.	Dry	Gas
Archer	49	690	26	0
Baylor	3	50	2	0
Brown	11	125	10	0
Callahan	10	20	8	1
Coleman	15	194	6	2
Comanche	2	0	1	1
Cooke	5	78	3	0
Eastland	7	20	4	1
Jack	5	348	1	0
Montague	6	188	2	0
Palo Pinto	6	55	3	1
Parker	1	0	1	0
Shackelford	12	363	7	1
Stephens	9	146	3	1
Throckmorton	2	0	2	0
Wichita	22	1,016	8	0
Wilbarger	18	1,700	4	0
Young	102	14,545	61	0
Total July	285	19,538	152	8
Total June	307	12,889	171	14
Difference	22	6,649	19	6

Summary of Rigs and Wells Drilling

County—	Rigs	S.D.	Drlg.	Ttl
Archer	14	9	27	50
Brown	3	11	1	15
Callahan	1	5	2	8
Coleman	4	4	16	24
Cooke	2	4	5	11
Clay	0	2	3	5
Eastland	5	10	14	29
Erath	0	4	2	6
Jack	1	1	7	9
Montague	0	2	2	4
Palo Pinto	4	6	8	18
Shackelford	1	3	10	14
Stephens	1	3	6	10
Throckmorton	0	3	6	9
Wichita	0	6	8	14
Wilbarger	3	15	9	27
Young	17	20	49	86
Miscellaneous counties	1	15	19	35
Total July	57	123	194	374
Total June	66	124	258	448
Difference	9	1	64	74

WELLS COMPLETED
ARCHER COUNTY

Kemp & Kempner-E, Shappell Oil Co. 1 15
Newell, E. J. Stump & Co. 1 ..... dry
G. W. Dugan, Burns & Long 1 ..... dry
Harmel-B, Consolidated Oil Co. of Texas 2 ..... dry
Prideaux, Continental Oil Co. 1 ..... dry
Portwood-F, Fain-McGaha Oil Corp. 1.. dry
Dickey, Looney & Hutcheson 1 ..... dry
Echols, J. H. Massie 1 96
Graham, Maxson & Panhandle 1 10
Covington, A. Minnich 1 4
G. B. Hamilton, Pet. Producers Co. et al 1 ..... dry
W. M. Cave et al, Reno Oil Co. 1 ..... dry
Graham, Silk & Chenault 1 ..... dry
Harmel, Vigil Oil & Gas Co. 10 26
T. B. Wilson-A, Barnsdall Oil Co. 16 .. 20
J. R. Parkey, Barnsdall and Hedrick-Camp D. Co. 1 ..... dry
L. F. Wilson-R, L. T. Burns 2 40
T. B. Wilson, Julian Oil Co. et al 1 ... dry
Llewellyn, Arkansas Fuel Oil Co. 1 ..... dry
Harmel-B, L. T. Burns 1 12
Falls County School Land-B, F. P. Cullum 1 42
Dr. G. B. Hamilton, Fain-McGaha Oil Corp. 1 ..... dry
Abercrombie & Taylor, Heydrick & Hickman 1 ..... dry
Fondville, C. E. Litchfield et al 1 ..... dry
Echols, J. H. Massie 2 35
Charles S. Arnold, George L. Pace 1 .. dry
Taylor, Brown and United P. Co. 7 ... dry
McCarty, Barnsdall Oil Co. 1 ..... dry
Falls County Fee, Bridwell Oil Co. 4 .. 10
Fails, Bridwell Oil Co. 6 60
Symank, Burns & Long 4 10
Ward Bros., H. C. Donohoo 1 20
Prideaux, Fresno & Gifford 1 ..... dry
Brown, Golding & Cochran 7 25
Lauster, Golding-Cochran and Dixie 2.. dry
Lowe, T. F. Hunter et al 1 ..... dry
Stinnett, A. P. Nicholson 1 20
Dupriest, J. E. Parker et al 1 24
Hanszen (Falls County), Perkins & Cullum 1 60
Tipkin, Perkins & Cullum 1 55
Prideaux, Wilson & Russell 14 13
Ferguson, Lambert et al 1 ..... dry
Mangold, Perkins & Cullum 2 ..... dry
Turbeville, Bridwell Oil Co. 1 ..... dry
Burns, Burns 1 ..... dry
Carr, Campbell Oil Corp. 1 ..... dry
Brown, Golding & Cochran 8 28
Echols, Massie 3 40
Green-B, Maxon 6 25

Wells completed 49
Production 690
Dry holes 26

BROWN COUNTY

Hill, Duffy et al 1 ..... dry
Davis, Greene Prod. Co. 8 ..... dry
J. H. Kellar, S. B. Herring 13 ..... dry
Roy Hickman, Kewanee O. & G. Co. 27 125
W. N. Favor, McCarter et al 1 ..... dry
J. C. Beck, Metcalf et al 1 ..... dry
C. Newsome, Phillips Pet. Co. 12 ..... dry
S. M. Parks, Elms et al 1 ..... dry
White Est., W. G. Sawyer et al 4 ..... dry
Favor, McCarter et al 2 ..... dry
Rutherford, Leiner & Walker 1 ..... dry

Wells completed 11
Production 125
Dry holes 16

BAYLOR COUNTY

Portwood, Consolidated Oil Co. et al 19 56
Portwood-E, Fain-McGaha Oil Corp. 1 .. dry
Portwood-B, Silk 1 ..... dry

Wells completed 1
Production 56
Dry holes 1

CALLAHAN COUNTY

R. D. Williams, Goodrum et al 2 ..... dry
Kennard-B, Humble O. & R. Co. 1 (second completion) ..... gas
J. B. Cutbirth, McCowan & Richardson 1 dry
A. Cutbirth et al, Colgin & Johnson 2 dry
R. P. Odom, McCarter et al 2 ..... dry
Alexander, Union Oil Co. of Nevada 3 dry
Jackson-D, Beams et al 1 20
Horn, Production Pur. Co. of Texas and Campbell Oil Corp. 1 ..... dry
Finley-B, Star Drlg. Co. 1 ..... dry
Irvin, Ellis & Dumas 1 ..... dry

Wells completed 10
Production 20
Dry holes 1
Gas wells 1
Gas production 15,000,000

COLEMAN COUNTY

L. Weaver, McDonald, Campbell et al 1 dry
J. Kellar, Prairie Oil & Gas Co. 1 ..... gas
Lane, Tower & McKanna, Inc., 1 ..... dry
M. T. Overall-B, Atlantic Oil Prod. Co. 4 dry
M. A. Phillips, Lamb et al 1 ..... dry
McCulloch, Meredith & Benton 2 30
G. W. Garrett, Oklahoma Oil Co. 8 13
W. L. Woodward, Harris, Haun & Fleeger 1 ..... dry
R. G. Bartholomew, Lloyd Oil Corp. 12 76
Wiley McClatchey, Windsor et al 1 ..... gas
Weaver, Vacuum Oil Co. et al 7 10
S. Hutchings, Homaokla Oil Co. 2 ..... dry
Kingsberry, Barney Carter 2 1
Switzer, Smith et al 3 97
Stewardson, Tidal Oil Co. 6 2

Wells completed 11
Production 194
Dry holes 8
Gas wells 2
Gas production 3,217,600

COOKE COUNTY

Ball, C. C. Lanier 1 ..... dry
Dennis, United Producers Co. 1 ..... dry
J. T. McDonald, Gulf Prod. Co. 1 ..... dry
Jacob, Russell and Lloyd Oil Corp. 1 .. 10
Truebenbach, Danciger Oil & Ref. Co. 2 62

Wells completed 5
Production 73
Dry holes 2

JACK COUNTY

J. A. Raley, Boller et al 5 75
Leffel, F. H. E. Oil Co. 5 100
Ezell, Republic Prod. Co. 4 140
G. C. Booth, Hammon & Garrett 1 ..... dry
B. F. Rankin, Magnolia Pet. Co. 1 25

Wells completed 5
Production 340
Dry holes 1

EASTLAND COUNTY

McClelland, Golden Rule Oil Co. 1 ..... gas
O. E. Lyerla, Hoffman & Page Co. 7 20
Mitchell, Gibson 1 ..... dry
Harbin, Teatsworth et al 4 5
Coop, Cranfill & Reynolds, Inc., 1 ..... dry
Vestal, Lucas, Isett & Painter 1 ..... dry
Hughes, Michel et al 1 ..... dry

Wells completed 7
Production 26
Dry holes 4
Gas wells 1
Gas production 9,680,000

COMANCHE COUNTY

Poteet, Crovette Oil Corp. 3 ..... gas
Wilhelm, Sun Oil Co. et al 1 ..... dry

Wells completed 3
Dry holes 1
Gas wells 1
Gas production 1,204,000

MONTAGUE COUNTY

Dennis, Bridwell Oil Co. 6 92
Wilton et al, Bridwell Oil Co. 1 ..... dry
Cunningham et al-B, The Texas Company 2 36
Cunningham et al, Barnsdall Oil Co. 6 50
Salmon, Bridwell Oil Co. 10 10
Brown, Bridwell and Continental Oil Co. 2 ..... dry

Wells completed 6
Production 188
Dry holes 1

PALO PINTO COUNTY

S. J. Stuart et al, Atlantic Oil Prod. Co. et al 2 ..... gas
P. F. Dalton, Hynds et al 1 ..... dry
A. P. Wilbar, McLester Oil Co. 2 ..... dry
R. Newman, W. K. Gordon et al 1 ..... dry
Allen & Richie, Prairie Oil & Gas Co. and Amerada 2 50
Costello, Root & Rhodes 1 1

Wells completed 6
Production 85
Dry holes 1
Gas wells 1
Gas production 9,730,000

PARKER COUNTY

Graybill, Burgone et al 1 ..... dry

SHACKELFORD COUNTY

Mrs. S. Sammons, Hart and Gist Prod. Co. 1 ..... dry
Nail, Section 134, Carter Dev. Co. 1 .. dry
E. A. Jeter, Gilman & McMurray 2 132
S. Lazarus, Humble Oil & Ref. Co. 1 .. dry

Dowson et al, Section 202, Roeser & Pendleton, Inc., 3 35
Dowson et al, Section 202, Roeser & Pendleton, Inc., 4 200
Mathews, Skelly Oil Co. et al 3 ..... 7½
Hastings, Cleveland Prod. Co. 1 ..... dry
Nall, Mitchem et al 1 ..... dry
Russ-Webb, Big States Oil Co. 17 ..... gas
Compton Bros., F. W. Holder 1 ..... dry
Morris & Buie, Wilson Drilling Co. 1 .. dry

Wells completed 12
Production 363½
Dry holes 7
Gas wells 1
Gas production 5,000,000

STEPHENS COUNTY

H. S. Post, Arrowhead Oil Co. 6 20
R. A. Elliott, Close Oil Co. 2 ..... dry
H. L. Glasscock, Clover Leaf Mining Co. 2 ..... gas
R. W. West, W. J. Rhodes 2 16
M. L. Lassiter, Texas Fidelity Oil Co. 1 dry
Walker, Texas Cons. Oil Co. 1 75
Henry, Lone Star Gas Co. 5 ..... gas
Douglass & Brown, G. Cooze 1 35
Corbett Est., Universal Oil Co. 1 ..... dry
Elliott, Close Oil Co. 2 ..... dry

Completions 9
Production 146
Dry holes 3
Gas wells 1
Gas production 9,300,000

WICHITA COUNTY

Kemp & Kempner-A, Arkansas Fuel Oil Co. 35 64
T. A. Womack, Bridwell & Mayfield 5.. 20
Waggoner Bros.-C, T. F. Hunter 13 ... 55
Overby, Lambert & Trout 4 80
Neale, Staley & Wynne 1 ..... dry
Waggoner, The Texas Company 383 ..... dry
Waggoner, The Texas Company 384 100
W. H. Chilson, Moran Drlg. Co. 1 ..... dry
Bickley-A, R. R. Clark et al 1 ..... dry
C. Kemple, Stidham & Thrasher 1 ..... dry
Logan et al, F. Ard et al 1 ..... dry
Kemp & Kempner-B, Arkansas Fuel Oil Co. 43 51
Kemp & Kempner-B, Arkansas Fuel Oil Co. 44 11
Sparks, Bridwell Oil Co. 2 ..... dry
Honaker, George J. Proctor 1 120
Waggoner, Tuman Oil Co. 19 60
Hodges-A, United Producers Co. 16 110
Hodges-B, United Producers Co. 4 45
Kemp & Kempner-A, Arkansas Fuel Oil Co. 36 160
Bickley, Clark et al 4 90
Ferguson, Hammond 3 ..... dry
Waggoner Bros.-C, Hunter 14 50

Wells completed 22
Production 1016
Dry holes 8

WILBARGER COUNTY

Waggoner, Davis Oil Corp. 9 90
Waggoner-W, Fain-McGaha Oil Corp. 27 230
Waggoner-Smith, Gray Back Dev. Co. 4 120
Waggoner-C, Lido Oil Co. 6 ..... dry
Waggoner-D, The Texas Company 6 69
Waggoner-Smith, Gray Back Dev. Co. 5 120
Waggoner-B, Staley-Wynne & Co. 9 70
Waggoner-C, Barkley & Meadows 13 .. 75
Waggoner-A, Empire Gas & Fuel Co. 25 117
Waggoner-II, Fain-McGaha Oil Corp. 1 dry
Waggoner-W, Phillips Pet. Co. 1 402
Waggoner-LL, Phillips Pet. Co. 1 35
Waggoner-B, Prairie Oil & Gas Co. 10 20
Hall, Shanor et al 1 ..... dry
Ayers, Simms Pet. Co. 2 ..... dry
Waggoner-F, Venmex Oil Co. 1 216
Waggoner-J, Waggoner Ref. Co. 15 .. 90
George, Zenith Oil Co. 4 46

Wells completed 18
Production 1700
Dry holes 4

THROCKMORTON COUNTY

J. D. Crump, Moore et al 1 ..... dry
Richards, Brihill et al 1 ..... dry

YOUNG COUNTY

J. F. Larimore, W. S. Brazelton et al 2 185
J. L. Boone, Bullington-Lee & Pendleton 8 ..... dry
D. Hargroves, C. W. Clark 1 ..... dry
J. H. Crain, Cooper & Hamilton 1 ..... dry
S. R. Jeffery, Elliott & Alexander 1 ... dry
Proffett, V. L. Grisham 1 ..... dry
Carpenter, Halmack Oil Co. et al 6 ... dry
Proffitt, R. H. Helm 1 ..... dry
Keith, Holbrook & Woods 1 ..... dry
Bloodworth-B, T. F. Hunter et al 4 ... dry
Larimore, Independent Oil & Gas Co. 1 360
Larimore, Independent Oil & Gas Co. 2 225
Carpenter, King Royalty Co. and Heydrick 3 35
Larimore et ux, Mollenkoph 2 ..... dry
E. M. Remington, E. Remington 5 300
Larimore et ux, E. R. Riggs 8 220
E. C. Keith, Riner & Omohundro 5 ... 8
R. C. Howard, Robertson Drilling Co. 1 dry
Belknap Coal Co., Rosenbaum et al 1.. dry
E. P. Tatum, Shappell Oil Co. 1 ..... dry
R. T. Kerr, Underwood Drilling Co. 1.. dry
Mrs. M. D. Peters, Wo-Mac Oil Co. 1...12½
Fisher, Wooten & Reed 3 ..... dry
Jarnigan-B, Atlantic Oil Prod. and Christie 3 300
Ragland, Roeser & Pendleton, Inc., 1.. dry
J. A. Winkler, Akin & Rayzor 1 86
J. L. Castleman, M. A. Anderson 1 .... dry
Larimore, W. S. Brazelton et al 3 ..... dry
Larimore, W. S. Brazelton et al 4 403
Larimore, W. S. Brazelton et al 5 360
Carpenter, G. B. Chandler 1 60
Belknap Coal Co., A. O. Disney 1 ..... dry
Groves, Lewis Groves 1 ..... dry
Larimore, Independent O. & G. Co. 3... 364
Larimore, Independent O. & G. Co. 4... 432
Larimore, Independent O. & G. Co. 6... 682
Larimore, Independent O. & G. Co. 8... 210
Larimore, Independent O. & G. Co. 9... 700
J. F. Larimore, Kliner & Riggs 1 960
W. R. Smedley, C. A. Normend 1 ..... dry
Larimore et ux, E. R. Riggs 9..... 1000
Larimore et ux, E. R. Riggs 10..... 600
Larimore et ux, E. R. Riggs 12..... 700
Larimore et ux, O. H. Simpson et al 1.. 310
Larimore et ux, O. H. Simpson et al 2.. dry
Barnett et al, M. E. Smith et al 1 ..... dry
Smith & Graves, H. F. Smith et al 1.... dry
A. C. Watson, Smith-Archer Oil Co. 1.. dry
Larimore et ux, Westheimer & Daube 4 400
Larimore et ux, Westheimer & Daube 5 310
Larimore et ux, Westheimer & Daube 6 150
Larimore, Young Bros. & Alexander 1.. dry
R. M. Williams-C, Long et al 1 489
F. T. Arnold, Roeser & Pendleton et al 1 dry
Davis, Bonner Oil Co. 9 9
Weichman, Bonner Oil Co. 1 ..... dry
Belknap Oil Co., W. D. Gillett 1 ..... dry
Smith, Goldsmith & Hamilton 1 ..... dry
Drum, R. H. Helm 1 ..... dry
Larimore, Independent Oil & Gas Co. 10 340
Graham, King Royalty Co. and Bullington 2 ..... dry
Bunger & Lisle, Pat Marr et al 1 ..... dry
Hausley, A. M. Meeks et al 1 ..... dry
Larimore et ux, Panhandle Ref. Co. 4.. dry
Barnhart, Rathke Oil Co. 1 ..... dry
Hunt, Rathke Oil Co. 1 ..... dry
Larimore et ux, E. R. Riggs 11 300
Hamilton, Western Prod. Co. 2 ..... dry
Larimore et ux, Westheimer & Daube 7 450
Larimore et ux, Westheimer & Daube 8 dry
Barrett et al, Willis & Terrell 2 ..... dry
Vick-A, Wootten-Reed et al 1 ..... dry
Larimore, Young Bros. & Alexander 2.. dry
Jarnigan, Shaw & Knox 4 300
Kisinger, Shaw & Lynch 1 ..... dry
Wilborn, Alexander & Snoddy 1 ..... dry
Larimore, Brazelton et al 6 400
Winkler, Consolidated Oil Co. 1 ..... dry
Rochelle, Davis & Quinn 1 ..... dry
Deitrich, Hynes 1 ..... dry
Larimore, Independent Oil & Gas Co. 5. 700
Larimore, Independent Oil & Gas Co. 11 dry
Larimore, Independent Oil & Gas Co. 14 300
Daniel, King Royalty and Heydrick 7.. 40
Bullock, Kliner, Riggs & Tidwell 1 ... dry
Brown, Lyles, Kimbell & Mitchell 1 ... dry
Larimore et ux, Mollenkoph 3 ..... dry
Baze, Pierce 1 ..... dry
Logan, Remington 1 ..... dry
Meaders, Reno Oil Co. 1 ..... dry
Larimore et ux, Riggs 14 650
Larimore et ux, Riggs 15 320
Ruching, Riner & Omohundro 1 ..... dry
Larimore et ux, Simpson et al 3 300
Wainwright, Wainwright 1 ..... dry
Watson, West et al 1 ..... dry
Larimore et ux, Westheimer & Daube 3 325
Brayer, Wooten & Reed 2 ..... dry
Larimore, Young Bros. and Terrell 2 .. dry
Morgan, Greene Prod. Co. 1 250
Daws, Mudge Oil Co. 1 ..... dry
Ware-B, Nash & Windfohr 2 ..... dry

Wells completed 102
Production 14,545
Dry holes 61

EAST TEXAS

Summary of Field Operations

	Comp.	Prod.	Dry	Gas*	Rigs	Drlg.	Ttl.
Bowie	0	0	0	0	1	1	
Camp	0	0	0	0	1	1	2
Cass	0	0	0	0	0	1	1
Harrison	0	0	0	0	1	1	2
Marion	0	0	0	0	0	2	2
Panola	1	0	0	1	5	4	9
Red River	0	0	0	0	0	2	2
Sabine	0	0	0	0	1	0	1
Shelby	1	0	1	0	0	1	1
Total July	2	0	1	1	8	13	21
Total June	6	0	2	4	6	11	17

*Panola County, 500,000 feet.

WELLS COMPLETED
PANOLA COUNTY

E. F. Mitcheson Survey; Brumble, The Texas Company 9 ..... gas

Gas production 500,000

SHELBY COUNTY

D. G. Green Survey; McCann, Loring Oil Co. 1 ..... dry

MISSISSIPPI FIELDS

Summary of Field Operations

	Comp.	Prod.	Dry	Gas*	Rigs	Drlg.	Ttl.
Adams	0	0	0	0	0	1	1
Alcorn	0	0	0	0	0	1	1
Chickasaw	0	0	0	0	0	1	1
Hinds	6	0	3	3	5	10	15
Humphreys	0	0	0	0	0	1	1
Lafayette	0	0	0	0	0	1	1
Lauderdale	0	0	0	0	1	2	3
Lincoln	0	0	0	0	0	1	1
Madison	0	0	0	0	1	0	1
Monroe	0	0	0	0	0	2	2
Rankin	3	0	0	3	0	3	3
Warren	0	0	0	0	0	1	1
Wilkinson	0	0	0	0	0	1	1
Yalobusha	0	0	0	0	0	1	1
Yazoo	0	0	0	0	0	1	1
Total July	9	0	3	6	7	27	34
Total June	1	0	1	0	9	25	34

WELLS COMPLETED
HINDS COUNTY

23-16-5e Riverside, Oscar Brown 1 ... dry
2- 5-1e Mayes, Interior Oil Co. 1 (drk.) ..... abd
29- 6-1e Capital Land & Investment Co., Jackson O. & G. Co. 1 dry
35- 6-1e Taylor, Jackson O. & G. Co. 1 dry
28- 6-1e Toole, La. G & F. Co. 1 ..... gas
35- 6-1e Bridges-Wilson, Love Brothers 1 ..... abd
11- 5-1e Hutton, Love Pet. Co. 1 .... gas
8- 5-1e Gordon, Love O. & G. Co. 1.. gas

Wells completed 6
Gas 3
Gas production 44,993,480
Dry 3

RANKIN COUNTY

13- 5-1e Rainey, Gulf Ref. Co. 1 ..... gas
12- 5-1e Littlefield, Pearl River O. & G. 1 ..... gas
12- 5-1e Marter, Pearl River O. & G. Co. 1 ..... gas

Gas production 80,000,000

ARKANSAS FIELDS

Summary of Field Operations

	Comp.	Prod.	Dry	Gas*	Rigs	Drlg.	Ttl.
Ashley	0	0	0	0	0	1	1
Calhoun	0	0	0	0	0	1	1
Cleburn	0	0	0	0	0	2	2
Columbia	2	0	2	0	0	1	1
Drew	0	0	0	0	0	1	1
Franklin	0	0	0	0	0	1	1
Garland	0	0	0	0	0	1	1
Hot Springs	0	0	0	0	2	0	2
Johnson	0	0	0	0	0	2	2
Lafayette	0	0	0	0	1	0	1
Little River	1	0	1	0	0	1	1
Lincoln	1	0	0	0	1	0	1
Logan	0	0	0	0	0	1	1
Madison	0	0	0	0	0	1	1
Miller	0	0	0	0	0	1	1
Nevada	0	0	0	0	0	1	1
Ouachita	2	37	0	0	3	4	7
Pike	1	0	1	0	1	0	1
Pope	0	0	0	0	0	2	2
Scott	0	0	0	0	0	1	1
Sebastian	1	0	0	1	0	3	3
St. Francis	1	0	1	0	0	0	0
Union	3	161	1	0	6	6	12
Van Buren	0	0	0	0	0	1	1
Washington	0	0	0	0	0	4	4
White	1	0	1	0	0	0	0
Yell	0	0	0	0	0	1	1
Total July	13	198	7	1	14	37	51
Total June	15	72	9	3	9	46	55

*Gas production: Sebastian, 900,000 feet.

WELLS COMPLETED
COLUMBIA COUNTY

25-19-22 Franks, Parker et al 1 ..... dry
3-18-22 Longino, J. K. Wadley 1 .... dry

LITTLE RIVER COUNTY

12-13-28 W. E. Black, McDonald & Shaw 1 ..... dry

OUACHITA COUNTY

21-15-19 Grayson, Magnolia Pet. Co. (2d comp.) 1 10
27-15-15 Berg, J. D. Reynolds 4 27

PIKE COUNTY

25- 5-26 Ruth Wilson, Tri-State O. & G. Co. 1 (jkd) ..... dry

SEBASTIAN COUNTY

21- 8-30 Cason, Lavaca O. & G. Co. 9 gas

Gas production 1,900,000

ST. FRANCIS COUNTY

28- 4-1e Whitted, Brown-Lee Drlg. Co. 1 (jkd.) ..... dry

UNION COUNTY

9-17-14 Kelly, Lion Oil Ref. Co. 2 (2d comp.) 5
10-18-13 Winn, Marine Oil Co. 3-B ... 156
11-18-13 Oliver, Sou. Crude Oil Purch. Co. 1 ..... dry

WHITE COUNTY

35- 9-8 Letona Townsite, Letona Syndicate 1 ..... dry

NORTH LOUISIANA

Summary of Field Operations

	Comp.	Prod.	Dry	Gas*	Rigs	Drlg.	Ttl.
Avoyelles	0	0	0	0	0	1	1
Bienville	3	0	0	3	1	1	2
Bossier	23	1,531	6	2	4	19	23
Caddo	8	135	1	0	4	8	12
Caldwell	1	0	1	0	0	0	0
Catahoula	0	0	0	0	1	2	3
Claiborne	1	0	0	1	0	3	3
Concordia	0	0	0	0	0	2	2
De Soto	5	825	3	0	4	9	13
East Carroll	1	0	0	1	0	0	0
Franklin	1	0	1	0	0	0	0
Jackson	0	0	0	0	0	1	1
La Salle	0	0	0	0	0	2	2
Lincoln	0	0	0	0	0	1	1
Morehouse	2	0	0	2	4	6	10
Natchitoches	0	0	0	0	1	3	4
Ouachita	4	0	0	4	9	4	13
Rapides	0	0	0	0	0	1	1
Red River	1	0	1	0	0	2	2
Richland	15	0	0	15	16	19	35
Sabine	13	9,018	0	5	10	31	41
Tensas	0	0	0	0	0	1	1
Union	4	0	0	4	4	2	6
Webster	5	210	1	0	14	6	20
Total July	87	11,719	14	37	72	124	196
Total June	94	5,346	40	26	75	136	211

*Gas production: Bienville, 7,900,000; Bossier, 60,500,000; Claiborne, 19,809,803; East Carroll, 47,883,000; Morehouse, 20,284,000; Ouachita, 81,000,000; Richland,, 500,470,000; Union, 13,054,000; total, 750,930,803 feet.

WELLS COMPLETED
BIENVILLE PARISH

15-16-10 Ashley, Ark.-La. Pipe Line Co. 3 ..... gas
22-16-10 K. G. Gardner, Ark.-La. Pipe Line Co. 1 ..... gas
22-16-10 O. G. Thomas, Ark.-La. Pipe Line Co. 1 ..... gas

Gas production 7,900,000

BOSSIER PARISH

31-23-11 H. H. Bain, Ark. Fuel Oil Co. 1 ..... dry
30-23-11 Kilgore, Ark. Fuel Oil Co. 3-A 10
30-23-11 Kilgore, Ark. Fuel Oil Co. 4-A 10
36-23-12 Barnette, Ark. Fuel Oil Co. 4-B 187
31-23-12 Kilgore, Ark. Fuel Oil Co. 7-B 5
36-23-12 Meyer, Ark. Fuel Oil Co. 2... 300
31-23-11 Ramsey, Ark. Fuel Oil Co. 1.. 5
25-23-12 Roberson, Askew et al 1 ..... dry
26-19-11 Smith, R. L. Autrey 7 (2,000,000 gas) 5
35-23-12 Wise, Eylers O. & G. Co. 1.. 5
30-16-11 Fee, Jones Chemical Co. 4 .. dry
7-21-11 Crystal O. Ref. Co., La. G. & F. Co. 1 ..... dry
22-19-11 Kendricks, H. I. Morgan 1 ... gas
21-19-11 Wetherbee, H. I. Morgan 5... dry
31-23-11 U. S. Government, Nat. Gas Producing Co. 3 (jkd) .... dry
30-23-11 J. W. Peyton, The Texas Company 1 (2d comp.) 50
25-23-12 J. W. Peyton, The Texas Company 5 45
31-23-11 Hy. Rose, The Texas Company 1 (2d comp.) (loc.) ..... abd
36-23-12 Wilkinson, The Texas Company 10 200
36-23-12 Wilkinson, The Texas Company 11 35
36-23-12 Wilkinson, The Texas Company 12 525
36-23-12 Wilkinson, The Texas Company 13 156
13-17-12 Schuler, Woodley Pet. Co. 1.. gas

Wells completed 23
Production 1531
Dry 6
Gas 2
Gas production 60,500,000

CADDO PARISH

29-20-15 Muslow, Falcon Oil Co. 4 (loc.) ..... abd
29-20-15 Nunnaly, Falcon Oil Co. 4 .. 50
34-21-16 Levee Board, Gulf Refining Co. 28-A (loc.) ..... abd
29-20-15 Nunnaly, Gulf Refining Co. 4 5
6-20-15 La. O. Ref. Corp., P. T. Mize 1-A 15
6-20-15 La. O. Ref. Corp., P. T. Mize 2-A 15
29-20-15 Leonard fee, The Texas Company 4 50
32-20-15 Barr heirs, L. A. Warren 1.. dry

Wells completed 8
Production 135
Dry 1

CALDWELL PARISH

4-11-3e C. M. Swett, A. E. Hudson, agt., 1 ..... dry

CLAIBORNE PARISH

6-19-5 Caskey, Triangle Drlg. Co. 3.. gas

Gas production 19,809,803

DE SOTO PARISH

32-14-13 Scott, Ark. Fuel Oil Co. 2 .. 25
6-10-13 Harris, Benson O. & G. Co. 1 dry
17-13-13 Nabors, W. C. Clark et al 1. dry
1-13-14 G. W. Sample, Lacy Oil Co. 1 dry
5-13-13 Farmer, Standard Oil Co. 2-A 800

Wells completed 5
Production 825
Dry 3

FRANKLIN PARISH

12-11-6e Moore, Davis et al 1 ..... dry

EAST CARROLL PARISH

12-19-10 Hicks, La. G. & F. Co. 1 ..... gas

Gas production 47,883,000

MOREHOUSE PARISH

3-20-4 Fee, Industrial Gas Co. 1 ... gas
2-20-4 Patton, United Carbon Co. 2.. gas

Gas production 20,284,000

OUACHITA PARISH

29-19-4 McEnery, Ark.-La. Pipe Line Co. 4 ..... gas
36-20-4 Fairbanks, Hope Production Co. 4 ..... gas
9-18-4 Pereboom, Jordan Drlg. Co. 2 gas
37-20-4 Smith, Ouachita Nat. Gas Co. 13 ..... gas

Gas production 81,030,000

RED RIVER PARISH

32-14-10 Krumbholtz, W. D. Ball 1 ... dry

RICHLAND PARISH

23-16-6 Lyles, Industrial Gas Co. 1.. gas
9-16-6 D. R. Sartor, La. G. & F. Co. 1-D ..... gas
17-16-6 McCoy, Northern La. Nat. Gas Co. 4-B ..... gas
2-16-6 Newberry, Palmer Corp. 1 .. gas
22-16-6 N. D. Thomason, Palmer Corp. 1 ..... gas
14-16-6 M. Chapman, Palmer Corp. 1. gas
25-16-6 Godfrey, Richland Operating Co. 2 ..... gas
22-16-6 Brown, Richland Production Co. 1 ..... gas
22-16-6 J. A. Ball, Richland Production Co. 1 ..... gas
2-16-6 Hallock, Southern Carbon Co. 1 ..... gas
1-16-6 H. H. Hemler, Southern Carbon Co. 1 ..... gas
1-16-6 M. L. McCoy, Southern Carbon Co. 1-C ..... gas
26-16-6 E. W. Dunning, United Carbon Co. 1 ..... gas
20-17-6 Mitchell, United Carbon Co. 2 gas
2-16-6 H. L. Thomason, United Carbon Co. 1 ..... gas

Wells completed 15
Gas 15
Production 500,470,000

SABINE PARISH

31- 8-12 Parrott, H. E. Granville 1 ... 11
34- 8-12 Bowman-Hicks, Loring Oil Co. 9 7
34- 8-12 Bowman-Hicks, Loring Oil Co. 11 3000
27- 8-12 Gardner, Loring Oil Co. 1 ...3000
20- 7-12 La. Long Leaf Lbr. Co., Pelican Nat. Gas Co. 2 ..... dry
12- 7-12 Sabine Lbr. Co., Pelican Nat. Gas Co. 2 ..... dry
4- 7-12 Bowman-Hicks, Ruston Drlg. Co. 1 ..... dry
35- 8-12 Bowman-Hicks, Ruston Drlg. Co. 1-A ..... dry
24- 7-12 Bowman-Hicks, Ruston Drlg. Co. 1-B ..... dry
20- 9-11 Blankenship, San Miguel Oil Co. 1 (drk) ..... abd

34-10-12 Ives, Standard Oil Co. 2 .... dry
32- 8-12 Lefkovitz, Stovall Drlg. Co. 1 .... dry
26- 8-12 Sabine State Bank, A. H. Tarver et al 3 4000
18- 6-12 La. Long Leaf Lbr. Co., Teteco Oil Corp. 1 (jkd) .... dry

Wells completed 13
Production 9018
Dry 8

UNION PARISH

9-21-3 Norsworthy, Greenwood Production Co. 2 .... gas
11-20-3 Digby, Nemours Corp. 1 .... gas
11-20-3 Stevenson, A. G. Stevenson, trustee, 1 .... gas
32-20-3 Howard, J. D. White 1 .... gas

Gas production 13,054,000

WEBSTER PARISH

2-22-11 Cook, H. M. Jones 1 30
35-23-11 Taylor, Glenn Kahle 1 (drk). abd
36-23-11 Slack, Kansas City Supply Co. 2 150
1-23-11 Gardner, Magnolia Pet. Co. 1 5
3-22-11 Pardee, Mt. Vernon Oil Co. 3. 30
1-22-11 Slack, Southern Production Co. 3 .... dry

Wells completed 5
Production 210
Dry 1

GULF COAST

Southeast Texas

	Comp.	Prod.	Abd	Gas	Rigs	Drlg.	Ttl.
Barbers Hill	20	9,785	1	0	3	25	28
Batson	2	0	2	0	0	1	1
Big Creek	2	100	1	0	0	2	2
Blue Ridge	3	0	3	0	0	1	1
Boling	0	0	0	0	0	1	1
Clay Creek	3	10	2	0	1	2	3
Damon Mound	1	0	1	0	0	1	1
DeWalt	2	588	0	0	0	1	1
Esperson	6	935	2	0	1	5	6
Fannett	1	0	1	0	0	1	1
Goose Creek	1	38	0	0	0	3	3
Hankamer	2	400	1	0	1	2	3
High Island	0	0	0	0	1	2	3
Hull	5	2,865	0	0	0	2	2
Humble	12	7,545	4	0	2	14	16
Liberty	2	615	0	0	0	2	2
Lost Lake	0	0	0	0	0	2	2
Markham	1	150	0	0	0	0	0
Nash	1	0	1	0	0	1	1
N. Dayton	4	915	1	0	1	2	3
Orange	0	0	0	0	0	1	1
Orchard	0	0	0	0	0	2	2
Pierce Junction	5	3,500	1	0	0	4	4
Port Neches	0	0	0	0	0	3	3
Raccoon Bend	5	539	3	0	1	2	3
Refugio	23	3,908	2	4	6	28	34
Saratoga	2	104	0	0	0	1	1
Sour Lake	0	0	0	0	0	1	1
Spindletop	11	2,937	5	1	1	7	8
W. Columbia	0	0	0	0	0	1	1
Miscellaneous	26	1,000	24	1	2	29	31
Total July	140	35,934	55	6	20	148	168
Total June	64	25,388	16	4	19	168	187
Difference	76	10,546	39	2	1	20	19

South Louisiana

	Comp.	Prod.	Abd	Gas	Rigs	Drlg.	Ttl.
Anse La Butte	0	0	0	0	0	1	1
Bayou Bouillon	0	0	0	0	0	2	2
Bayou Blue	1	205	0	0	0	2	2
Edgerly	1	0	1	0	0	2	2
Hackberry	6	1,830	3	0	1	5	6
Jennings	1	99	0	0	0	3	3
Lockport	1	800	0	0	1	6	7
Port Barre	4	1,400	1	0	0	2	2
Starks	1	125	0	0	0	1	1
Sulphur	3	1,747	0	0	0	2	2
Sweet Lake	0	0	0	0	0	2	2
Vinton	5	8,320	0	0	2	4	6
Welsh	2	0	2	0	0	0	0
Miscellaneous	6	1,240	5	0	3	21	24
Total July	31	15,766	12	0	7	53	60
Total June	21	5,871	10	0	11	51	62
Difference	10	9,895	2	0	4	2	2

Gulf Coast:

Total July	171	51,700	67	6	27	201	228
Total June	85	31,259	26	4	30	219	249
Difference	86	20,441	41	2	3	18	21

WELLS COMPLETED

TEXAS

BARBERS HILL—CHAMBERS COUNTY

Fisher, Mills Bennett Prod. Co. 2 2000
Gulf-Higgins, Mills Bennett Prod. Co. 3 850
Wilburn, Mills Bennett Prod. Co. 2 320
Cornelia Barber, Humphreys Corp. 1 50
Kirby, Humphreys Corp. 2-C 40
Kirby, Humphreys Corp. 3-H 80
Morgan, Humphreys Corp. 1 200
Woodward, McAlbert Oil Co. 1 800
Wilburn, Sinclair O. & G. Co. 7 300
Chambers Co., Sun Oil Co. 5 825
Wilburn fee, Sun Oil Co. 5 35
Wilburn fee, Sun Oil Co. 6 140
J. Wilburn, Sun Oil Co. 5 90
J. Wilburn, Sun Oil Co. 7 1500
Wilburn, F. L. Thompson 2 50
Chambers, Yount Lee Oil Co. 11 250
Chambers, Yount Lee Oil Co. 14 660
Zadie Fisher, Yount Lee Oil Co. 2 1500
Richardson, Yount Lee Oil Co. 5 .... abd
Woodward, Yount Lee Oil Co. 7 145

Total completions 20
Production 9785
Abandoned 1

BLUE RIDGE—FORT BEND COUNTY

R. C. Duff, Joe Collins 1 .... abd
Robinson, Navarro Oil Co. 9-A .... abd
Blakely, E. F. Simms 1 .... abd

Total completions 3
Abandoned 3

BATSON—HARDIN COUNTY

Carlton, Ada Benn Oil Co. 130 .... abd
Brock & Dies, Paraffine Oil Co. 1 .... abd

BIG CREEK—FORT BEND COUNTY

T. W. Davis, Gulf Prod. Co. 23 100
Davis, Gulf Prod. Co. 58 .... abd

Total completions 2
Production 100
Abandoned 1

CLAY CREEK—WASHINGTON COUNTY

Clay, Sun Oil Co. 4 .... abd
Grote, Sun Oil Co. 9 .... abd
Janner, Sun Oil Co. 3 10

Total completions 3
Production 10
Abandoned 2

DAMON MOUND—BRAZORIA COUNTY

Wisdom, Layne et al 6 .... abd

DEWALT—FORT BEND COUNTY

Brazos, Humble O. & R. Co. 15 218
Sugarland, Humble O. & R. Co. 10 370

Total completions 2
Production 588

ESPERSON—LIBERTY COUNTY

Davis, Cranfill-Reynolds 4 75
Esperson, Cranfill-Reynolds 5 .... abd
Esperson, Cranfill-Reynolds 12 240
Esperson, Cranfill-Reynolds 13 600
Vajdak, Union Explth. Co. 1-A 20
Moores Bluff, Republic Prod. Co. 1 .... abd

Total completions 6
Production 935
Abandoned 2

FANNETT—JEFFERSON COUNTY

Burrell, Gulf Prod. Co. 5 .... abd

GOOSE CREEK—HARRIS COUNTY

Simms Smith, Humble O. & R. Co. 41 38

HANKAMER—LIBERTY COUNTY

Boyt, Gulf Prod. Co. 7 400
A. E. Lee, Gulf Prod. Co. 1 .... abd

Total completions 2
Production 400
Abandoned 1

HULL—LIBERTY COUNTY

Barngrover, Empire G. & F. Co. 18 135
Barngrover, Empire G. & F. Co. 31 130
Barngrover, Empire G. & F. Co. 32 400
Dolbear, Republic Prod. Co. 44 2000
Dolbear, Republic Prod. Co. 66 200

Total completions 5
Production 2865

HUMBLE—HARRIS COUNTY

Foley, Benedum & Trees 1 .... abd
Bennett, Dunbar & Deering 1 15
Bender, L. W. House 1 .... abd
Hirsch, Houtex Oil Co. 1 .... abd
Wheeler & Pickens, T. P. Lee 2 30
Fee, Rio Bravo Oil Co. 1 350
Fee, Rio Bravo Oil Co. 2 1800
Lee, South Texas Pet. Co. 4 1000
Bender, Sun Oil Co. 7 2100
Bender, Sun Oil Co. 8 2000
Ashton, Trap Shooter Riley Oil Co. 1 250
Pickins, E. M. Wilson 4 .... abd

Total completions 12
Production 7545
Abandoned 4

LIBERTY—LIBERTY COUNTY

O'Brien, Empire G. & F. Co. 12 575
Mitchell, Sun Oil Co. 10 40

Total completions 2
Production 615

MARKHAM—MATAGORDA COUNTY

Meyers, Hamil Drlg. Co. 1 150

NASH—BRAZORIA COUNTY

Wisdom, Rycade Oil Corp. .... abd

NORTH DAYTON—LIBERTY COUNTY

Jamison, Harrison Oil Co. 1 855
Simmons & Brown, Houtex Oil Co. 1 50
Paraffine fee, The Texas Co. 1 .... abd
Gulf, Victor Oil Co. 1 10

Total completions 4
Production 915
Abandoned 1

PIERCE JUNCTION—HARRIS COUNTY

Taylor, Gulf Prod. Co. 32 700
Dooley, Navarro Oil Co. and Texas Exp. Co. 19 700
Settegast, Rio Bravo Oil Co. 18-A 1000
Herman est., Saxet Oil Co. 5 .... abd
D. F. Boyles, Superior Oil Corp. 2 1100

Total completions 5
Production 3500
Abandoned 1

RACCOON BEND—AUSTIN COUNTY

Bellville, Humble and Valley 5 260
Brown, Humble and Valley 1 .... abd
Hardy, Humble and Valley 1-B .... abd
Mitchell, Humble and Valley 1-C .... abd
Payne, Humble and Valley 9 279

Total completions 5
Production 539
Abandoned 3

REFUGIO—REFUGIO COUNTY

Fannie Heard, Houston Oil Co. 1-A 250
O'Brien, Houston Oil Co. 1 700
P. H. Rooke, Houston Oil Co. 13 150
J. F. B. Heard, Independent O. & G. Co. 1-B 200
J. F. B. Heard, Independent O. & G. Co. 2-C 50
Mercy Academy, Independent O. & G. 1 25
Shelly, Independent O. & G. Co. 1 500
J. F. B. Heard, Edwin M. Jones 2-A 50
J. F. B. Heard, Edwin M. Jones 4-A 300
Strauch, Larco Co. 5 50
Holmes Heard, Mission Drlg. Co. 1 450
O'Brien, Mission Drlg. Co. 1 300
City, Moody-Seagraves Prod. Co. 8 .... abd
O'Brien, Moody-Seagraves Prod. Co. 2 .. gas
O'Connor, Morgan Oil Corp. 1 .... gas
O'Connor, Morgan Oil Corp. 3 .... gas
O'Connor, Morgan Oil Corp. 4 500
St. Johns, T. P. Morgan 1 .... abd
Ryals, Pearson Properties, Inc. 2 55
Buckley, Sun Oil Co. 5 50
J. F. B. Heard, Union Prod. Co. 2 78
Powers, Union Prod. Co. 4 .... gas
Morgan-Vance, Union Prod. Co. 4 200

Total completions 23
Production 3908
Abandoned 2
Gas 4

SARATOGA—HARDIN COUNTY

Cotton, Rio Bravo Oil Co. 85-A 22
Cotton, Rio Bravo Oil Co. 87-A 82

Total completions 2
Production 104

SPINDLETOP—JEFFERSON COUNTY

Fee, Yount Lee Oil Co. 28 212
Gladys City, Yount Lee Oil Co. 33 .... abd
Gladys City, Yount Lee Oil Co. 53 .... abd
Greer & Hall, Yount Lee Oil Co. 1 .... abd
McFaddin, Yount Lee Oil Co. 8 600
McFaddin, Yount Lee Oil Co. 33 125
McFaddin, Yount Lee Oil Co. 47 950
McFaddin, Yount Lee Oil Co. 132 .... abd
McFaddin, Yount Lee Oil Co. 135 1050
McFaddin, Yount Lee Oil Co. 136 .... abd
McFaddin, Yount Lee Oil Co. 137 .... gas

Total completions 11
Production 2937
Abandoned 5
Gas 1

MISCELLANEOUS TEXAS

Austin County—
Lancashire, Black Oil Co. 1 .... abd
Brazoria County—
Danbury-Blakely-Winston, Shell Pet. 2. abd
Danbury-Blagely-Winston, Shell Pet. 2 abd
Danbury-Blakely-Winston, Shell Pet. 3. abd
Clemens-Proebste, Shell Pet. Corp. 2 .... abd
Chambers County—
Kirby, Pure Oil Co. 1 .... abd
Colorado County—
Hugh Wilson, Gulf, Humble and Penn 1 abd
Grimes County—
Stoneham, Cranfill-Reynolds 1 .... abd
Harris County—
Milroy, Bert & Griffin 1 .... abd
Rorick, Cranfill & Reynolds 1 .... abd
Hockley-Warren, Humble O. & R. Co. 7 abd
Cedar Bayou-Davis, Sloan Prospecting 1 abd
Good, Strang Pet. Co. 1 .... abd
Jasper County—
Flourney, Helmrich & Payne, Inc. 1 .... abd
Jefferson County—
Big Hill-Fitzhugh, The Texas Co. 1 .... abd
Big Hill-Pipkin, The Texas Co. 3 .... abd
Liberty County—
Moss Bluff-McFaddin, Gulf Prod. Co. 1 1000
Devers-Sabine Tram, Humble O. & R. 1. abd
Matagorda County—
Hawkins, Cockburn et al 1 .... abd
Titus, Watts Oil Co. 1 .... abd
Refugio County—
Urica, Dixon et al 1 .... abd
Victoria County—
McFaddin, Lion O. & R. Co. 1 .... gas
Waller County—
J. N. Taub, Humble O. & R. Co. 1 .... abd
Davis, Kirby Pet. Co. 2 .... abd
Washington County—
Frankie, Fisher & Tarkington .... abd
Cascamp, Mid-Kansas O. & G. 1 .... abd

Total completions 26
Production 1000
Abandoned 24
Gas 1

SOUTH LOUISIANA

BAYOU BLUE—IBERVILLE PARISH

Schwing, Standard Oil Co. 5 205

EDGERLY—CALCASIEU PARISH

Paraffine, Hercules Oil Co. 3 .... abd

HACKBERRY—CAMERON PARISH

Verdine, Calcasieu Oil Co. 2 1800
Watkins, Calcasieu Oil Co. 19 .... abd
Erwin, Gulf Ref. Co. 1 .... abd
Portia, Yount Lee Oil Co. 1 .... abd
Lacey, Yount Lee Oil Co. 4-C 20
R. Vincent, Yount Lee Oil Co. 3 10

Total completions 6
Production 1830
Abandoned 3

LOCKPORT—CALCASIEU PARISH

Miller, Vacuum Oil Co. 26 800

JENNINGS—ACADIA PARISH

Jennings, Abshire-Bolyard 6 99

PORT BARRE—ST. LANDRY PARISH

S. W. Futral, Alex Rice, tr. 1 .... abd
Hoskins, Gulf Ref. Co. 3-A 350
Lahaya, Gulf Ref. Co. 2 50
Botnay Bay, The Texas Co. 8 1000

Total completions 4
Production 1400
Abandoned 1

STARKES—CALCASIEU PARISH

Starks, Gulf Ref. Co. 23 135

SULPHUR—CALCASIEU PARISH

Fee, Union Sulphur Co. 750 61
Fee, Union Sulphur Co. 760 1500
Fee, Union Sulphur Co. 761 186

Total completions 3
Production 1747

VINTON—CALCASIEU PARISH

Gardiner est., Gulf Ref. Co. 2 1500
Gardiner, Gulf Ref. Co. 3 2100
Gray, Supreme Oil Co. 1 500
Matilda Gray, Vinton Pet. Co. 7 3500
Strip, Wilson Broach Oil Co. 3 720

Total completions 5
Production 8320

WELSH—JEFFERSON DAVIS PARISH

Abbott, Yount Lee Oil Co. 1 .... abd
Courtney, Yount Lee Oil Co. 1 .... abd

MISCELLANEOUS LOUISIANA

Iberia—
Jeff Island-Lake Peigneur, Jefferson Lake Oil Co. 6 .... abd
Jefferson Davis—
Richards, M. L. Vincent 1 .... abd
LaFourche—
Leesville-L. L. & E., The Texas Co. 1. abd
St. Mary—
Wax Lake-Wax Lake, Pure Oil Co. 2 .... abd
Terrebonne—
Dog Lake-Dog Lake Bayou, The Texas Co. 2-A .... abd
Lake Barre-State-Lake Barre, The Texas Co. 4 1240

Total completions 6
Production 1240
Abandoned 5

KENTUCKY FIELDS

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drlg.	Ttl.
Warren	2	8	0	0	0	0	0
Barren	5	4	2	1	0	2	2
Ohio	66	2,190	15	9	3	35	38
Daviess	22	852	3	1	0	25	25
Hancock	3	95	0	1	0	4	4
McLean	4	230	1	0	0	14	14
Henderson	13	94	3	5	0	7	7
Webster	1	0	0	1	0	3	3
Butler	0	0	0	0	1	1	2
Hopkins	0	0	0	0	0	7	7
Muhlenberg	2	5	1	0	0	8	8
Christian	0	0	0	0	2	2	4
Breckenridge	1	0	1	0	0	1	1
Union	0	0	0	0	0	1	1
Logan	0	0	0	0	0	1	1
Todd	0	0	0	0	0	1	1
Caldwell	0	0	0	0	0	1	1
Metcalf	0	0	0	0	0	1	1
Cumberland	1	0	1	0	0	2	2
Clinton	0	0	0	0	0	1	1
Wayne	2	12	0	0	0	1	1
Estill	0	0	0	0	0	3	3
Lee-Owsley	1	4	0	0	0	3	3
Lawrence-Johnson	2	13	0	0	0	1	1
Johnson-Magoffin	4	16	0	0	0	6	6
Floyd	0	0	0	0	0	1	1
Clay	1	0	1	0	1	1	2
Knox	0	0	0	0	0	1	1
McCracken	0	0	0	0	0	1	1
Madison	0	0	0	0	0	1	1
Total July	130	3,521	28	18	7	136	143
Total June	121	1,881	37	17	8	162	170
Difference	9	1,640	9	1	1	26	27

WELLS COMPLETED

WARREN COUNTY

Bowling Green—P. M. Perkins, P. M. Perkins 1 5
W. K. Dent, George McGinley 1 1

Wells completed 2
Production 6

BARREN COUNTY

Glasgow—Mayfield hrs., J. W. Porter 3 3
George Mayfield, J. W. Porter 5 1
Tom Pace, Joe Leach & Son 1 .... dry
Frank Richardson, Joe Leach & Son 1 .... dry
Glasgow Junction, Missouri-Kansas P. L. Co. 1 .... gas

Wells completed 5
Production 4
Dry 2
Gas 1

OHIO COUNTY

Hartford — Dave Brooks, Cumberland Pet. 2 75
Small Skillman, Cumberland Pet. 2. 60
Small Skillman, Cumberland Pet. 1. 80
E. L. Massie, Cumberland Pet. 1 20
W. A. Moseley, Cumberland Pet. 1 80
W. A. Moseley, Cumberland Pet. 2 80
W. A. Moseley, Cumberland Pet. 3 .... dry
W. Hamilton, Cumberland Pet. 7 .... dry
W. Hamilton, Cumberland Pet. 8 80
W. Hamilton, Cumberland Pet. 9 80
W. Hamilton, Cumberland Pet. 10 30
W. Hamilton, Cumberland Pet. 11 30
M. Medcalf, Chester Oil 9 20
M. Medcalf, Chester Oil 10 20
G. W. Patton, Chester Oil 1 80
G. W. Patton, Chester Oil 2 80
G. W. Patton, Chester Oil 3 120
G. W. Patton, Chester Oil 4 100
G. W. Patton, Chester Oil 5 300
Martha Medcalf, Lawrence Oil Corp. 11 25
Crow & Connor, James C. Ellis & Co. 2, 4 .... gas
Crow & Connor, James C. Ellis & Co. 3 30
Ira Lloyd, James C. Ellis 1 .... gas
Melvin Bartlett, James C. Ellis & Co. 2 .... dry
Frank McKinley, James C. Ellis & Co. 3 20
E. Perry Talley, James C. Ellis & Co. 4 15
Wm. Mills, James C. Ellis 2 .... gas
C. A. Kelley, James C. Ellis & Co. 2. gas
W. P. Howard, James C. Ellis & Co. 11 5
C. A. Kelley, Penn-Indiana Oil 18 85
C. A. Kelley, Penn-Indiana Oil 19 .... dry
A. P. Kelley, S. R. Nigh & Co. 14 50
Chas. Bowman, Wood Oil 2 .... dry
Cody Woolsey, Wood Oil 1 30
A. R. Richards, The Ohio Oil 1 .... dry
Isaac Finley, H. C. Smith Co. 2 .... gas
T. P. Royal, T. P. Royal & Co. 16 55
Westerfield hrs., Rex-Pyramid Oil 1 dry
S. C. Rhodes, Rex-Pyramid Oil 7 .... dry
V. C. Steele, C. M. Root 15 .... dry
Olden Lake, C. M. Root 3 20
C. M. Wade, L. C. Young 1 .... dry
Mahoney hrs., L. C. Young 1 30
Morgan, James C. Ellis & Co. 2 .... dry
Morgan, James C. Ellis & Co. 3 5
Blackerby, Leeper Oil 2 25
Blackerby, Leeper Oil 3 30
J. W. Greer, Leeper Oil 4 25
R. A. Miller, Louisville Gas & Electric 9 20
Clint Park, N. W. Shiarella Trus. 1. 100
W. E. Crow, Petroleum Explth. 1 15
Martha King, S. H. Russell 1 .... gas
Will Coleman, S. R. Berry & Co. 3 22
Ambrose, Marion French & Co. 1 50
T. L. Hickey, Brown & Co. 4 10
A. D. Kirk, J. E. Hare & Co. 1 25
M. J. Brown, Owensboro Bank & Trust 11 10

R. A. Duke, Missouri-Kansas Pipe Line 20 100
V. R. Ferguson, Missouri-Kansas Pipe Line 1, 2 ..... gas
Nation, Oliver Jenkins & Co. 2 ..... dry
Chester Wimsatt, Rowe & Thomas 2. 25
Mollie Murray, Dr. Silverthorn 1 .... dry
Geo. Fulkerson, Dewey Huff & Co. 1 dry
Joe Cheek, Dr. Buckner & Co. 2 .... dry

Wells completed 66
Production 2100
Dry 15
Gas 9

DAVIESS COUNTY

Owensboro—Goldie Ambrose, Ben T. Wright & Co. 4 25
Goldie Ambrose, Ben T. Wright & Co. 5 15
W. T. Ware 80-ac., Hupp & French 4 40
J. A. Baird, Cumberland Pet. 2 ..... dry
B. Mackey, Cumberland Pet. 5 ..... dry
Rose B. Tyler, Eastern Gulf Oil 5 .. 25
Will Christian, Eastern Gulf Oil 1 .. 20
Ethel Chapman, Eastern Gulf Oil 6.. 20
W. G. Hayden No. 2, Hupp, Duff & McMahan 3 40
W. G. Hayden No. 2, Hupp, Duff & McMahan 4 75
W. G. Hayden No. 2, Hupp, Duff & McMahan 5 75
Widow Noel, Hupp, Duff & Co. 4 .. 60
Martha Ann Sparks, Hupp, Duff & Co. 2 10
Barlow, Petsan Oil 2 ..... gas
E. R. Eaty, Johnson O. & R. 2 75
E. R. Eaty, Johnson O. & R. 3 100
H. W. Foster, Johnson O. & R. 1 .... dry
Atherton, Dr. Sirman 1 102
Atherton, Dr. Sirman 2 70
Homer Cossler, Dr. Sirman 1 75
Robert Simmins, H. C. Smith Co. 2.. 10
McLemore, Oil Well Drlg. 2 15

Wells completed 22
Production 852
Dry 3
Gas 1

HANCOCK COUNTY

Pellville—J. B. McGovern, Loman, Daley & Co. 5 80
Bee Vogles, McDonough & Ford 1 .. gas
Link Richards, James C. Ellis & Co. 4 15

Wells completed 3
Production 95
Gas ..... -

McLEAN COUNTY

Calhoun—Cox hrs., Miller & Damron 2 65
McManama, Cameron, Thompson & Co. 1 65
McManama, McLean Dev. 1 100
R. A. Crabtree, W. A. West & Co. 1. dry

Wells completed 4
Production 230
Dry 1

HENDERSON COUNTY

Niagara—Joe Slively, Niagara O. & G. 1, 2, 3 ..... gas
Joe Slively, Niagara O. & G. 4 10
Minnie Robards, Niagara O. & G. 1.. 4
C. M. Gish, Thomas Wittmer 7 ..... gas
C. M. Gish, Thomas Wittmer 8 35
J. E. Knight, P. E. Tichenour 5 40
Henry Watson, P. E. Tichenour 1 ... dry
R. M. Nunn, Henderson Oil Synd. 2.. gas
Chas. Branson, Fred Esslinger & Co. 1 ..... dry
Hamilton hrs., Wood Oil 1 ..... dry
R. F. Parker, Pearson & Parks 1 5

Wells completed 13
Production 94
Dry 3
Gas 5

WEBSTER COUNTY

Sebree—Asia Feast, H. C. Wilson & Co. 1 ..... gas

MUHLENBERG COUNTY

Greenville—Joe C. Johnson, Ellis, Young & Co. 1 5
Willis Allen, Ellis, Young & Co. 1 .. dry

Wells completed 2
Production 5
Dry 1

BRECKENRIDGE COUNTY

Glen Dean—Matthews, James C. Ellis & Co. 1 ..... dry

CUMBERLAND COUNTY

Bear Creek—Hasting, B. H. Allen 1 .. dry

WAYNE COUNTY

District 3—Stearns Lumber, Pigeon Rock Oil 15 10
C. E. Bell, Smith-Cameron 3 2

Wells completed 2
Production 12

LEE-OWSLEY COUNTIES

District 16—J. A. Curry, Ashcraft & Barnes 5 4

LAWRENCE-JOHNSON COUNTIES

District 22—Dan Skaggs, Swiss Oil Corp. 8 3
District 33—Sanford Lyons, Swiss Oil Corp. 35 10

Wells completed 2
Production 13

JOHNSON-MAGOFFIN COUNTIES

District 29—D. M. Wheeler, Peoples Pittsburgh Trust 5 5
District 30—Joe Howard, Oliver Jenkins 3 1
District 31—B. M. Stone, Swamp Branch Oil & Gas 1 7
B. M. Stone, Swamp Branch Oil & Gas 2 3

Wells completed 4
Production 16

CLAY COUNTY

Manchester—W. W. Rawlings, Petroleum Expltn. 1 ..... dry

ROCKY MOUNTAIN AREA

MONTANA

Summary of Wells Completed

District—	Comp.	Prod.	Dry	Gas	Rig	Dlg.	Ttl.
Cat Creek	1	0	0	0	0	1	1
Kevin-Sunburst	7	80	1	1	8	12	20
Pondera	1	20	0	0	1	1	2
Border Field	4	720	1	0	3	11	14
Miscellaneous	7	0	3	4	7	77	84
Total July	20	820	5	5	19	102	121
Total June	25	718	9	6	20	78	98
Difference	5	102	4	1	1	24	23

WYOMING

Summary of Field Operation

Dist. or County—	Comp.	Prod.	Dry	Gas	Rigs	Drlg.	Ttl.
Salt Creek	0	0	0	0	2	4	6
Big Horn	1	1,000	0	0	0	6	6
Carbon	2	0	2	0	2	9	11
Fremont	0	0	0	0	1	6	7
Hot Springs	0	0	0	0	0	3	3
Johnson	0	0	0	0	0	3	3
Lincoln	0	0	0	0	1	6	7
Natrona (exc. Salt Creek)	1	25	0	0	1	12	13
Niobrara	1	0	1	0	1	1	2
Park	0	0	0	0	7	17	24
Sublet	1	40	0	0	1	11	12
Sweetwater	0	0	0	0	2	9	11
Uinta	0	0	0	0	3	12	15
Weston	9	788	3	0	8	9	17
Miscellaneous	0	0	0	0	1	3	4
Total July	15	1,853	6	0	30	111	141
Total June	22	2,436	1	1	32	111	143
Difference	7	583	5	1	2	0	2

NEW MEXICO

Summary of Field Operations

County—	Comp.	Prod.	Dry	Gas	Rigs	Drlg.	Ttl.
Chaves	0	0	0	0	0	1	1
De Baca	0	0	0	0	0	2	2
Eddy	2	50	1	0	1	6	7
Lea	19	122,645	0	0	20	41	61
McKinley	0	0	0	0	1	9	10
Rio Arriba	0	0	0	0	0	4	4
San Juan	1	0	0	1	1	8	9
San Miguel	0	0	0	0	0	5	5
Torrance	0	0	0	0	1	2	3
Miscellaneous	0	0	0	0	1	8	9
Total July	22	122,695	1	1	25	86	111
Total June	5	8,735	0	1	22	89	111
Difference	17	113,960	1	0	3	3	0

COLORADO

Summary of Field Operations

County—	Comp.	Prod.	Dry	Gas	Rigs	Drlg.	Ttl.
Boulder	0	0	0	0	0	5	5
Fremont	0	0	0	0	0	14	14
Huerfano	0	0	0	0	0	3	3
Jackson	0	0	0	0	0	5	5
La Plata	0	0	0	0	1	2	3
Larimer	0	0	0	0	5	5	10
Las Animas	1	0	1	0	1	3	4
Moffat	1	228	0	0	7	8	15
Montezuma	1	0	0	1	0	0	0
Morgan	0	0	0	0	0	2	2
Rio Blanco	2	2	1	0	0	2	2
Routt	0	0	0	0	3	1	4
Yuma	1	0	1	0	0	1	1
Miscellaneous	0	0	0	0	1	30	31
Total July	6	230	3	1	18	81	99
Total June	5	250	2	0	19	79	98
Difference	1	20	1	1	1	2	1

UTAH

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drlg.	Ttl.
Total July	0	0	0	0	1	29	30
Total June	2	0	1	1	1	29	30
Difference	2	0	1	1	0	0	0

WELLS COMPLETED
MONTANA

32-35- 1 Putnam, Barmac Prod. Co. 10 10
31-35- 1 Allen, Big West Oil Co. 33... 15
22-35- 2 Newman, California Co. 11.... 20
13-34- 2 Morton, A. H. Campbell 8 ... gas
33-35- 2 McCormick, Diamond Oil Co. 14 10
29-35- 1 Bluhm, W. E. Rice 5 25
36-35- 2 State, Texas Pacific C. & O. 54 dry
11-27- 4 Miller, Maryland Corp. 1 20
13-37- 4 McAfee, Dakota-Montana 1 .. dry
2-37- 4 Farbo, Mid-Continent Oil 2 .. 520
1-37- 4 Farbo, Ohio Oil Co. 1 100
1-37- 4 Farbo, Rice-Radigan 1 100
36-20- 3 State, Piegan Oil Co. 1 ..... dry
15- 1-33 Lot 7, Big Horn Gas Co. 13.. gas
16- 1-33 NE, Big Horn Gas Co. 14 ... gas
8-21- 4 Miller, U. S. Pet. Co. 1 ..... dry
35- 9-58 Gas Dev. Co. 54 ..... gas
15- 8-59 Capitol Gas Corp. 1 ..... gas
10-51- 1 Lee, W. J. Mahan et al ..... dry

Wells completed 19
Production 820
Dry 5
Gas 5

NEW MEXICO
WELLS COMPLETED

21-16-31 Grier, Henderson, Dexter & Blair 1 ..... dry
18-17-31 Russell, Pueblo Oil Co. 5 50
19-18-38 McKinley, Shell Pet. Corp. 1 10,124
10-19-38 State, Midwest Ref. Co. 36 .. 523
15-19-38 State, Midwest Ref. Co. 13 .. 423
15-19-38 State, Midwest Ref. Co. 1 ... 1750
15-19-38 Selman, Prairie O. & G. 1 .. 613
15-19-38 Crump, Prairie O. & G. 1... 5000
15-19-38 Crump, Prairie O. & G. 2... 1080
10-19-38 Terry, Walker Oil Corp. 2 .. 450
32-18-38 State-Northrup, Ohio Oil Co.1 7500
31-18-38 Fowler, Empire Gas & Fuel 1 12,000
30-18-38 McKinley, Amerada Pet. Corp. 1 8500
30-18-38 McKinley, Amerada Pet. Corp. 2 11,000
24-18-37 State, Texas & Pacific 1-G .. 7500
32-18-38 Grimes, Gypsy Oil Co. 1 16,000
30-18-38 McKinley, Geo. F. Getty, Inc. 1 10,000
29-18-38 Grimes, Tidal Oil Co. 1 20,000
30-18-38 State, Ohio Oil Co. 1 10,000
11-18-36 State, Fisher & Lowrie 1.... 32
21-17-32 Baish, Maljamar O. & G. 3.. 150
14-28-11 Strickland, Southern Union Gas 1 ..... gas

Wells completed 22
Production 122,695
Gas 1
Dry and abandoned 1

WYOMING
WELLS COMPLETED

11-38-78 Smith, Wyalta Oil Co. 5 25
8-46-63 Omaha Syndicate 3 8
13-46-64 Osage Trust Co. 7 15
13-46-64 Osage Trust Co. 6 150
13-46-64 Osage Trust Co. 4 100
13-46-64 Wesco Oil Co. 5 15
14-46-64 Bock, Lambie Oil Co. 1 500
11-47-64 Omaha Syndicate 1 ..... dry
11-46-64 State, Kelso Oil Co. 1 ..... dry
13-46-64 Osage Trust Co. 5 ..... dry
27-27-113 California Pet. Co. 5-E 40
32-36-65 Converse Sheep, Ohio Oil Co. 1 abd
11-24-88 Producers & Refiners 1 .... dry
34-23-79 Kanawha O. & G. Co. 1 .... dry
22-56-97 Union Gas, Ohio Oil Co. 1 ..1000

Wells completed 15
Production 1853
Dry and abandoned 6

COLORADO
WELLS COMPLETED

23-32- 63 Fionz, Trinidad Dev. Co. 1 .. dry
22-4n- 92 Parkinson, Midwest Ref. Co. 19-SD 228
29-36- 14 Haller, Mesa Verde Ranch Co. 1 ..... gas
31-2n-102 Patent, Brigman Pet. Co. 1.. dry
31-2n-102 Patent, Brigman Pet. Co. 2.. 2
3-2s- 42 Andrews, Phillips Pet. Co. 1 dry

Wells completed 6
Production 230
Gas 220,000
Dry and abandoned 3

EASTERN FIELDS

Summary of Work Completed

Fields—	Comp.	Prod.	Dry	Gas
Allegany	11	13	0	0
Bradford	122	134	0	0
Venango-Clarion	22	13	4	6
Middle Field	5	6	0	1
Butler-Armstrong	6	3	4	0
Southwest Pennsylvania	17	58	5	7
West Virginia	35	121	7	19
Southeast Ohio	68	1,197	14	16
Total July	286	1,545	34	49
Total June	403	2,155	38	56
Difference	117	610	4	7

Summary of Rigs and Wells Drilling

Fields—	Rigs	Drlg.	Ttl.
Allegany	3	15	18
Bradford	10	27	37
Venango-Clarion	3	10	13
Middle Field	0	1	1
Butler-Armstrong	2	7	9
Southwest Pennsylvania	1	17	18
West Virginia	23	88	111
Southeast Ohio	24	63	87
Total July	66	228	294
Total June	77	285	362
Difference	11	57	68

WELLS COMPLETED
ALLEGANY FIELD

Fee, F. H. Stephan, mgr. trustee 1
VanCampen, J. H. Brahaney 1
Kurtzhaltz, E. G. & F. W. Stephan 2
Fee, Jacob Meridan et al 3
VanCampen, J. H. Brahaney 1
McCafferty, B. McCafferty et al 2
Forest Oil Corp. ..... pressure
Forest Oil Corp. ..... pressure
Fee, C. M. Barnes est 1
Fee, J. M. McDivitt et al 1
Fee, L. A. Wilson et al 1

Wells completed 11
Production 13
Pressure 3

BRADFORD FIELD

Montz, L. F. Kinley et al 63 1
Bingham 369, D. W. Daly 81..... pressure
Forest Oil Corp. 1
Forest Oil Corp. 1
Forest Oil Corp. (11 wells) ..... pressure
Forest Pet. Corp. (7 wells) 7
Forest Pet. Corp. (5 wells) ..... pressure
Niagara Oil Corp. (27 wells) 27
Niagara Oil Corp. (15 wells) ..... pressure
Hawkins Oil Corp. 1
Forest Dev. Corp. 1
Forest Dev. Corp. 1
Forest Dev. Corp. (5 wells) ..... pressure
Fee, M. C. Reidy 2
Fee, Willrock Prod. Co. et al ..... pressure
Fee, Willrock Prod. Co. et al ..... pressure
Fee, Willrock Prod. Co. et al ..... pressure
Fee, R. O. Landers et al 2
Franchot, Thos. T. Fox 3
Fee, G. W. Crooks estate 1
Fee, Forest Dev. Corp. 1
Fee, Forest Dev. Corp. 1
Griffith, Tanner and McKean Co. Prod. Co. 40 2
Griffith, Tanner and McKean Co. Prod. Co. 2
Morris, Healey Pet. Corp. 1
Taylor, South Penn Oil Co. 1
Quintuple, McKean Prod. Co. 2
Fee, T. H. Givan 3
Moody, South Penn Oil Co. 2
Moody, South Penn Oil Co. 2
Fee, Hillard & Dodge 3
Dent, South Penn Oil Co. 1
Fee, Olean Pet. Co. ..... pressdre
Fee, Olean Pet. Co. ..... pressure
Fee, Olean Pet. Co. ..... pressure
Fee, South Penn Oil Co. 2
Fee, South Penn Oil Co. 15
Willets, Slingerland 1
Fee, Kate Schoonover 1
Kinley, H. J. Walter 1
Melvin, South Penn Oil Co. 1
Bingham 454, South Penn Oil Co. 2
Fee, Minard Run Oil Co. 10
Borden, White Rabbit Oil Co. 3
Bucher, Sloan & Zook ..... pressure
Jones, South Penn Oil Co. 1
Borden, T. P. Thompson, Jr. 3
Borden, T. P. Thompson, Jr. 3
Brooks, South Penn Oil Co. 1
Brooks, South Penn Oil Co. 1
Fennell, Curtis Oil Corp. 1
Fennell, Curtis Oil Corp. 1
Quintuple, Healey Pet. Corp. 1
Tibbits, Minard Run Oil Co. 1
McMurray, Shannon Bros. 3
Bennett, Bradford Prod. Co. 4
Dent, Moody & Moody 4
Blair, South Penn Oil Co. 5

Completions 122
Production 134
Pressure 44

VENANGO-CLARION

Tract 47, Oil City Natl. Bank. 24..... 1
Chamberlin, C. B. Kern 19..... 1
Caffrey, Moyer and Lamey 40..... 1
Mathews, Plum Oil Gas Co. et al .... dry
Garis, Alum Rock Gas Co. 6 ..... gas
Hanst, McClellan 1 ..... dry
Richey, Richey, Weller et al 1..... dry
Nicklin, C. F. Hitchcock 49 1
Donaldson, H. J. Hoffman 9 1
McFadden, F. T., & Co., Braunschweiger et al 18 1
Simcox, S. Y. Ramage 71 1
McBurney, Oil City Trust Co. 10 1
Kapp, Youkers & Webb 4 2
Deitrich, Hess & Wood 5 1
McLaughlin, Thos. McLaughlin 23.... dry
Nuhfer, Dempseytown Gas Co. and Nuhfer 4 ..... gas
Glass, Fryburg Motor Co. 3 ..... gas
Nuhfer, Nufher Co. 1 ..... gas
Nuhfer, Nuhfer Co. 2 ..... gas
Nuhfer, Nuhfer Co. 3 ..... gas
Williams, Dale Hook et al 5 1
Columbia, Brundred Oil Corp. 49 1

Completions 22
Production 13
Dry 4
Gas 6

MIDDLE FIELD

Elder, S. H. Elder & Co. 2
Bingham, H. E. Camp est. 2
Lot 37, Keenan & Schmutz ..... gas
Lot 37, Keenan & Schmutz 1
Wardwell, South Penn Oil Co. 1

Completions 5
Production 6
Gas ..... -

BUTLER-ARMSTRONG

Cashdollar, Beals & Freeman 3..... dry
Goepfort, Wallat, Frederick et al 1.... dry
Halstead, Heeter, Halstead et al 1 .... dry
Stevens, Wachsmuth & McGowan 4 .... dry
Snyder, Finnessy 16 1
McGinley, Ravenswood Oil Co. 3 2

Completions 6
Production 3
Dry 4

SCOUTHWEST PENNSYLVANIA
WELLS COMPLETED
WASHINGTON COUNTY

Logue, H. V. Logue Co. 1 20
Taylor, Carnegie Natural Gas Co. 3 ... 20
Clark, Day & Baumgard 1 10
Tannehill, Bishop O. & G. Co. 3 ..... dry
ALLEGHENY COUNTY
Burrus, Matkovitch Oil Co. 1 5
George, Manufacturers L. & H. Co. 1 .. 3
BEAVER COUNTY
Fiske, Fiske Co. 2 ..... dry
GREENE COUNTY
Moore, People Natural Gas Co. 1 ..... gas
Fox, Peoples Natural Gas Co. 1 ..... gas
Morris, Peoples Natural Gas Co. 2 .... dry
Lynch, Equitable Gas Co. 1 ..... dry
Cowell, Equitable Gas Co. 1 ..... gas
Morris, Equitable Gas Co. 2 ..... dry
Johns, Equitable Gas Co. 1 ..... gas
Yeager, Equitable Gas Co. 1 ..... gas
Stephens, Equitable Gas Co. 1 ..... gas
Phillips, Equitable Gas Co. 1 ..... gas

WEST VIRGINIA
WELLS COMPLETED
HARRISON COUNTY

Lucas, Philadelphia Gas Co. 4,986 .... gas
MONONGALIA COUNTY
Martin, C. C. Nuss, Treas 1 ..... dry
Bean, Pittsburgh & W. Va. Co. 3 ..... gas
WETZEL AND TYLER COUNTIES
Antel, Cochran & Cochran 1 ..... dry
Byard, Manufacturers L. & H. Co. 3.. gas
DODDRIDGE COUNTY
Maxwell, Columbian Carbon Co. 57 .... gas
RITCHIE COUNTY
Hess, Philadelphia Oil Co. 1 ..... dry
Hall heirs, Clark Braden 1 ..... gas
Weinrick, W. H. Bickle 3 ..... dry
GILMER COUNTY
Kelley, Philadelphia Gas Co. 1 ..... gas
Stump, Mt. Iron & Supply Co. 2 ..... dry
Mitchell, Park Bowser 3 ..... dry
Stump, Hope C. & R. Co. 2 ..... dry
CLAY COUNTY
Brown, Swan, Goshorn, Virginian G. & O. Co. 24 15
Brown, Swan, Goshorn, Virginia G. & O. Co. 25 35
Brown, Swan, Goshorn, Virginia G. & O. Co. 26 15
Hicks, South Penn Oil Co. 9 25
Parker, South Penn Oil Co. 9 12
ROANE COUNTY
Vandal, Hope C. & R. Co. 4 5
Harless, Fred O. & G. Co. 2 ..... gas

CALHOUN COUNTY
Ice, M. F. Crowley 1 2
Sterm, G. L. Cabot, Inc., 1 ..... gas
LINCOLN COUNTY
Zutar, Richmond & Adkins 3 ..... gas
BOONE COUNTY
Lafollette, Robson, Prichard Pure Oil Co. 40 6
Federal Coal Co., Pure Oil Co. 44 ..... gas
Federal Coal Co., Pure Oil Co. 45 ..... gas
Cassingham, Owens B. & M. Co. 20 ... gas
KANAWHA COUNTY
Quincy Coal Co., G. L. Cabot, Inc., 17.. gas
Quincy Coal Co., G. L. Cabot, Inc., 39.. gas
Sunday Creek Coal Co., United F. G. Co. 4,056 ..... gas
Tomkins, Cambridge Gas Co. 1 ..... gas
Campbell, United F. G. Co. 4,216 ..... gas
Warburton, United F. G. Co. 4,064 .... gas
CABELL COUNTY
McComas, Larner Gas Co. L95 ..... gas
LEWIS COUNTY
Carothers, Hope Natural Gas Co. 1 ... 5

SOUTHEAST OHIO
WELLS COMPLETED
MONROE COUNTY
Hartshorn, Pure Oil Co. 2 5
PERRY COUNTY
Moore, Ohio Fuel Gas Co. 3 23
Porter, Ohio Fuel Gas Co. 1 ..... gas
Wilson, Ohio Fuel Gas Co. 1 ..... gas
Henning, D. H. Courtney 1 5
Porter, E. C. Marshall 1 2
Longstreth, Allegheny O. Co. 17 5
Lehman, Hopewell Gas Co. 1 ..... gas
Diller, Pur Oil Co. 1 2
HOCKING COUNTY
Harsh, Pure Oil Co. 1 73
GUERNSEY COUNTY
Quillan, Ohio P. & R. Co. 1 75
Gray, Ohio P. & R. Co. 4 25
Oldham, Preston O. Co. 1 ..... dry
MUSKINGUM COUNTY
Denny, Midland Oil Co. 4 120
Maullar, F. B. Maullar 1 95
Baughman, Cannon O. & G. Co. 1 ..... gas
Slack, Palmer & Geisinger 1 70
Bryan, Atha Oil Co. 4 11
Pitts, Atha Oil Co. 1 ..... gas
Redmond, Atha Oil Co. 1 ..... dry
Geyer, Wehrle Co. 1 ..... gas
Zanesville B. & L. Co., Atha O. C. 1.. dry
Ford, Melick Oil Co. 2 ..... dry
Shurtz, M. F. Whitehall 1 ..... gas
LICKING COUNTY
Mossholder, J. C. Robinson 2 160
Priest, Pure Oil Co. 7 30
Booth, Ralph Morpell 1 104
Priest, Pure Oil Co. 5 40
Davidson, Preston Oil Co. 3 160
Criswell, E. H. Everett 1 25
TUSCARAWAS COUNTY
Huffman, Gordon Oil Co. 4 20
Asher, Gordon Oil Co. 2 ..... dry
Faulson, Capital Drilling Co. 3 65
Asher, Gas Prod. Co. of Ohio 1 50
McKeen, T. Lynch 3 ..... gas
HOLMES COUNTY
Mellor, Ohio F. G. Co. 1 ..... dry
White, Ohio F. G. Co. 1 ..... dry
Sterling, East Ohio Gas Co. 5 50
ASHLAND COUNTY
Smith, Great Lakes Oil Co. 8 ..... dry
Wolf, Great Lakes Oil Co. 3 ..... gas
Wolf, Great Lakes Oil Co. 1 ..... dry
COSHOCTON COUNTY
Ashcraft, McClay Brothers 1 ..... gas
Scott, Preston Oil Co. 1 ..... gas
VINTON COUNTY
Stanley, H. C. Farmer 5 4
Clark, Powers O. & G. Co. 6 4
NOBLE COUNTY
Johaning, H. E. Schmidt 2 ..... gas
Morrison, Naaman Morrison 1 1
Calland, Ohio F. G. Co. 1 ..... gas
Coal Lands, D. R. Greenlees 8 5
Luke, C. D. Harper 1 2
ATHENS COUNTY
Tom, Ohio F. G. Co. 1 ..... dry
Whaley, C. H. Beasley 13 1
Knowlton, Letonia O. & G. 2 1
Bean, Preston Oil Co. 1 ..... gas
MORGAN COUNTY
Harris, W. S. Harris 2 3
MEIGS COUNTY
Carnahan, 25 Associates, Inc., 20 4
Carnahan, 25 Associates, Inc., 21 6
Jividen, 25 Associates, Inc., 1 ..... gas
Salser, Preston Oil Co. 1 ..... gas
WASHINGTON COUNTY
Cline, Herman Hill 1 ..... dry
Cordray, McVey Brothers 1 ..... dry
Hall, Forrest Cline 1 1
Collins, W. H. Noland 8 2
Allaway, Wharden Fulmer 1 ..... dry
Biehl, Metcalf & Curtis 6 1
JEFFERSON COUNTY
Jefferson Co., Bradon Spear 9 5
Smith, Owen & Graham 1 2
BELMONT COUNTY
Hadsell, M. C. McBride 2 ..... dry

CENTRAL OHIO

Summary of Field Operations

	Com.	Pro	I.	Dry	Gas	Rig	Dlg.	Ttl.
Ashland	7	40	3	2	10	12	22	
Medina	5	29	2	2	2	6	8	
Lorain	3	0	2	1	1	7	8	
Wayne	3	0	1	2	1	7	8	
Holmes	4	100	2	1	4	6	10	
Cuyahoga	1	0	0	1	0	0	0	
Ashtabula	0	0	0	0	0	4	4	
Richland	0	0	0	0	3	3	6	
Knox	3	0	1	2	3	9	12	
Coshocton	3	0	1	2	2	3	5	
Summitt	4	0	0	4	2	10	12	
Licking	5	394	0	2	4	11	15	
Muskingum	13	344	3	5	9	13	22	
Athens	9	1	3	5	5	16	21	
Meigs	3	4	0	2	7	21	28	
Jackson	0	0	0	0	6	9	15	
Vinton	0	0	0	0	3	6	9	
Lawrence	0	0	0	0	2	3	5	
Tuscarawas	5	261	1	0	2	9	11	
Stark	1	0	0	1	1	7	8	
Fairfield	3	0	0	3	0	1	1	
Guernsey	4	107	1	0	2	11	13	
Belmont	1	0	1	0	0	5	5	
Gallia	0	0	0	0	0	1	1	
Scioto	0	0	0	0	0	1	1	
Pike	0	0	0	0	0	2	2	
Delaware	0	0	0	0	0	1	1	
Total July..	81	1,280	21	35	69	184	253	
Total June..	119	1,801	27	51	60	194	254	
Difference ..	38	521	6	16	9	10	1	

ASHLAND COUNTY
Orange—James Fluke, Kemrow Co. 2.. dry
Perry—Martie M. Wheeler, Crownshield & Co. 6 10
Montgomery—J. L. Smith, Ohio Fuel Gas 1-5,148 ..... gas
Lake—Harry Horn, Gold Crown Oil & Gas 3 30
J. P. Smith, Robinson & Co. 8 ..... dry
W. S. Wolf, Robinson & Co. 4 ..... dry
Hanover—Thomas Doup, I. E. O'Hall 1 gas

Wells completed 7
Production 40
Dry 3
Gas 2

MEDINA COUNTY
Brunswick—J. F. Meyer, Ohio Fuel Gas 1-5,177 ..... gas
Chatham—Watson-Sanford, Oko Oil & Gas 37 10
Watson-Sanford, Oko Oil & Gas 38... 2
Watson-Sanford, Oko Oil & Gas 39... 5
Henry Essing, Oko Oil & Gas 36..... 5
Henry Essing, Oko Oil & Gas 37..... 7
M. V. Garva, Curtis & Akens 1 ..... dry
Harrisville—V. A. Vandemark, M. and S. Burtner 1 ..... dry
Westfield—Lee Barnes, Ohio Fuel Gas 1-5,156 ..... gas

Wells completed 9
Production 29
Dry 2
Gas 2

LORAIN COUNTY
Carlisle—Ira W. Ives, Ohio Fuel Gas 1-5,175 ..... dry
W. P. Penfound, Ohio Fuel Gas 1-5,093 gas
Eliza Price, McMillan & Co. 2 ..... dry

Wells completed 3
Dry 2
Gas 1

WAYNE COUNTY
Congress—George G. Britton, Barnhart & Co. 4 ..... gas
Plain—Harry McAnaney, Green & Co. 3 dry
Chester—John Begley, Ohio Fuel Gas 1-5,095 ..... gas

Wells completed 3
Dry 1
Gas 2

HOLMES COUNTY
Hardy—S. H. Sterling, East Ohio Gas 5 100
Monroe—Charles Swank, Lydic Oil & Gas 5 ..... gas
Richland—Emanuel White, Ohio Fuel Gas 1-5,120 ..... dry
Valentine Mellor, Ohio Fuel Gas 1-5,143 ..... dry

Wells completed 4
Production 100
Dry 2
Gas 1

CUYAHOGA COUNTY
Olmstead—G. W. Walkden, Ohio Fuel Gas 1-5,112 ..... gas
KNOX COUNTY
Brown—Thomas Doup, Ohio Fuel Gas 1-5,075 ..... dry
J. J. Wyatt, Ohio Fuel Gas 3-5,168.. gas
Jefferson—E. L. Staats, Ohio Fuel Gas 1-5,101 ..... gas

Wells completed 3
Dry 1
Gas 2

COSHOCTON COUNTY
Franklin—K. E. McLeod, Ohio Fuel Gas 1-5,128 ..... dry
Newcastle—John C. Scott, Ohio Fuel Gas 2-4,593 ..... gas
Pike—Ashcraft heirs, McClay Bros. 1.. gas

Wells completed 3
Dry 1
Gas 2

SUMMITT COUNTY
Franklin—Wm. Sorrick, East Ohio Gas 1 gas
Charles Smith, F. A. Brendall & Co. 3 gas
Wm. H. Habel, F. A. Brendall & Co. 3 gas
Greene—A. G. Keck, F. A. Brendall & Co. 1 ..... gas

Wells completed 4
Gas 4

LICKING COUNTY
Fallsburg—J. H. Willie, F. M. Rugg, trustee, 1 160
Sam Mossholder, Wittmer Prop., trustee, 4 ..... gas
Sam Mossholder, Wittmer Prop., trustee, 5 160
Hopewell—Merl Dodson, Wehrle Gas 2 gas
Hanover—Homer C. Priest, Pure Oil 6.. 74

Wells completed 5
Production 394
Gas 2

MUSKINGUM COUNTY
Washington—Huber Slack, Palmer & Geisinger 1 80
Hopewell—James M. Sidle, Hopewell Gas & Fuel 4 125
Ella M. Denney, Midland Oil 4 120
Clay—Earl Baughman, Craig, Adair & Co. 1 ..... gas
Wayne—Minnie A. Werner, Atha Co. 1 dry
Harrison—Ira L. Shurtz, H. C. Farmer 1 gas
Perry—L. M. Bryan, Atha Co. 4 15
I. B. Baker, Wittmer Prop., trustee, 2 4
Highland—W. M. Crowder, Fetty & Louchery 1 ..... gas
Union—John McCloud heirs, Wehrle Co. 1 ..... gas
J. W. Riley, Atha Co. 1 ..... dry
J. K. Pitts, Atha Co. 1 ..... gas
Newton—James Ford, McIntyre & Guthrie 2 ..... dry

Wells completed 13
Production 344
Dry 3
Gas 5

ATHENS COUNTY
Ames—J. J. Joy, Ohio Fuel Gas 1-5,171 gas
T. M. Fleming, Ohio Fuel Gas 1-5,169 gas
Thomas J. White, Ohio Fuel Gas 1-5,185 ..... gas
Robert Bean, Fox & Mosure 12 ..... dry
Berne—L. Lovell & Co., Frank Selby 3 gas
H. D. and C. C. Curtis, Carpenter & Gliazer 8 ..... dry
Lee—C. H. Tom, Ohio Fuel Gas 1-5,050 dry
Alexander—W. D. Whaley, Bode & Co. 12 1
York—Hocking Fire Clay, Wittmer Prop., trustee, 1 ..... gas

Wells completed 9
Production 1
Dry 3
Gas 5

MEIGS COUNTY
Sutton—J. C. Fividen, Tyree & Co. 2... gas
Wm. Carnahan, Tyree & Co. 20 4
Ben F. Salser, Ohio Fuel Gas 1-5,119 gas

Wells completed 3
Production 4
Gas 2

TUSCARAWAS COUNTY
Salem—F. L. Euga, Gordon Oil 2 .... dry
Washington—George W. Asher, Gordon Oil 2 ..... dry
Dolly Huffman, Gordon Oil 3 25
Lewis Little, Capitol Drilling 3 136
Stewart Asher, Hopewell Oil & Gas 1 100

Wells completed 5
Production 261
Dry 2

STARK COUNTY
Lawrence—R. L. Baughman, Penn Oil & Gas 1 ..... gas
FAIRFIELD COUNTY
Rush Creek—E. W. Eyman, Ohio Fuel Gas 2-5,213 ..... gas
E. W. Eyman, Ohio Fuel Gas 3-5,242 gas
Pleasants—H. Hartman, City Natural Gas Works 4 ..... gas

Wells completed 3
Gas 3

GUERNSEY COUNTY
Wheeling—Clarence Quillan, East Ohio Gas 1 72
C. and A. Gray, East Ohio Gas 9 30
Cambridge—I. J. Oldham, Ohio Fuel Gas 1-5,083 ..... dry
Spencer—H. C. Hollett, Ohio Fuel Gas 1-5,158 5

Wells completed 4
Production 107
Dry 1
BELMONT COUNTY
Union—Shepherd-Wilson, Frank Stranges & Co. 8 ..... dry

LIMA FIELD

Summary of Field Operations

	Com.	Pro	I.	Dry	Gas	Rig	Dlg.	Ttl.
Wood	1	0	1	0	1	1	2	
Hancock	4	155	1	0	0	1	1	
Allen	1	50	0	0	0	2	2	
Auglaize	1	7	0	0	0	0	0	
Mercer	1	0	0	1	0	1	1	
Sandusky	1	2	0	0	0	1	1	
Seneca	4	5	1	1	0	5	5	
Lucas	0	0	0	0	0	1	1	
Ottawa	0	0	0	0	0	1	1	
Shelby	0	0	0	0	0	2	2	
Crawford	0	0	0	0	0	2	2	
Hardin	5	56	1	1	0	12	12	
Wyandot	0	0	0	0	0	2	2	
Huron	0	0	0	0	0	1	1	
Henry	0	0	0	0	0	1	1	
Total July..	18	275	4	3	1	33	34	
Total June..	22	87	6	5	2	31	33	
Difference ..	4	188	2	2	1	2	1	

WELLS COMPLETED
WOOD COUNTY
Plain—B. P. Stratton, Murray B. Chidester 9 ..... dry
Montgomery—J. Fautz, Sun Savings Bank 3, 4 ..... abd
Freedom—Eliza Hoodlebring, Cleveland Fuel Oil 5, 6 ..... abd
Lake—Elizabeth Thone, Charles F. Zeising & Co. 1 ..... abd
Portage—H. L. Reynolds, Hugh R. Reynolds 1, 2 ..... abd

Wells completed 1
Dry 1
Abandoned 1

HANCOCK COUNTY
Liberty—L. Huntworth, L. Cramer 1... dry
G. R. Stewart, Heckathorn Oil 7 30
Biglick—E. H. James, R. W. Kirk & Co. 2 100
Portage—Isaac Hart, Mayhias Bros. 14. 25
J. M. Cusac, Ohio Oil 6, 7, 9, 15..... abd

Wells completed 4
Production 155
Dry 1
Abandoned 4

ALLEN COUNTY
Bath—Nancy E. Leedy, Roalman & Peak 3 50
AUGLAIZE COUNTY
Logan—H. C. Whetstone, Floyd Fry & Co. 3 7
MERCER COUNTY
Butler—J. S. Burch, Recovery Oil & Gas 1 ..... gas
SANDUSKY COUNTY
Washington, Edith Fought, Home Banking Co. No. 63, Lot 6 2
Scott—Area Ernst, Joseph Fritz & Co. 3 abd
Emma Renton, Joseph Fritz & Co. 9. abd
J. Bowers, Joseph Fritz & Co. 9, 10. abd
Peter Bowe, Joseph Fritz & Co. 12 ... abd
W. H. Shatenberger, Joseph Fritz & Co. 8, 9 ..... abd
J. M. Sherman, John M. Sherman & Co. 9, 10 ..... abd
A. Putnam, Charles W. Putnam 1 ... abd

Wells completed 1
Production 3
Abandoned 10
SENECA COUNTY
Jackson—R. E. Harrison, Kansas-Ohio Oil & Gas 1 5
Liberty—C. and O. Ewall, McPherson-Fosson Oil 1 ..... dry
Clinton—Mary E. Crum, J. H. Murphy & Son 2 ..... gas

Wells completed 3
Production 5
Dry 1
Gas 1
OTTAWA COUNTY
Allen—Gustoff Riedman, R. M. Bell & Co. 1, 2 ..... abd
HARDIN COUNTY
Cessna—Grant Geiger, Geiger Oil 2 30
Oscar C. Ateiner, Eagan & White 1 .. 25
Orville T. Price, John Eberla 1 1
C. and J. Tudor, Kemrow Co. 1 ..... gas
Washington—W. B. Howard, Kemrow Co. 1 ..... dry

Wells completed 5
Production 56
Dry 1
Gas 1
Abandoned 1

MICHIGAN FIELDS

Summary of Field Operations

	Com.	Pro	I.	Dry	Gas	Rig	Dlg.	Ttl.
Muskegon	0	0	0	0	2	10	12	
Isabella	10	2,170	0	0	32	41	73	
Midland	1	0	1	0	4	9	13	
Kent	0	0	0	0	1	2	3	
Ottawa	1	0	1	0	0	1	1	
Oceana	0	0	0	0	0	5	5	
Mason	0	0	0	0	1	4	5	
Manistee	0	0	0	0	0	1	1	
Lake	0	0	0	0	0	2	2	
Cass	1	0	1	0	1	1	3	
Newyago	2	0	1	1	3	8	11	
Tuscola	0	0	0	0	0	1	1	
Bay	0	0	0	0	2	0	2	
Clare	0	0	0	0	2	3	5	
Montcalm	1	0	1	0	1	0	1	
Saginaw	1	0	1	0	0	0	0	
Emmett	0	0	0	0	0	1	1	
Eaton	0	0	0	0	1	1	2	
Kalkaska	0	0	0	0	1	1	2	
Branch	0	0	0	0	0	1	1	
Berrien	2	0	2	0	1	0	1	
Iosco	0	0	0	0	2	1	3	
Missauke	0	0	0	0	1	0	1	
Delta	0	0	0	0	0	1	1	
Monroe	0	0	0	0	0	4	4	
Lenawee	0	0	0	0	0	1	1	
Kalamazoo	0	0	0	0	0	1	1	
Gratiot	0	0	0	0	4	6	10	
Shiawassee	1	10	0	0	0	1	1	
Livingstone	0	0	0	0	2	1	3	
Jackson	0	0	0	0	1	0	1	
Sanilac	0	0	0	0	3	0	3	
Presque Isle	0	0	0	0	1	0	1	
Calhoun	1	0	1	0	0	0	0	
Van Buren	0	0	0	0	2	0	2	
Washtenaw	0	0	0	0	0	1	1	
Cheboygan	0	0	0	0	1	0	1	
Osceola	0	0	0	0	1	1	2	
Mecosta	0	0	0	0	0	2	2	
Total July..	21	2,180	9	1	70	112	182	
Total June..	20	3,221	4	1	58	108	166	
Difference ..	1	1,141	5	0	12	4	16	

WELLS COMPLETED
ISABELLA COUNTY
Chippewa—State-Isabella, Pure Oil B-6 115
John B. Rayner, Pure Oil C-2 300
John B. Rayner, Pure Oil C-3 300
Lewis Thompson, Pure Oil 4 250
Sawada, Pure Oil 1 290
J. Fox, Pure Oil 9 110
Iosco, Pure Oil 2 60
Sawada, Stork Oil 1 200
Grubb 80-A, Brown, G-Lee-P Co. 2.. 420
Isabella—Cole, Gibson-Johnson-Borden Co. 1 125

Wells completed 10
Production 2170
MIDLAND COUNTY
Jerome—State of Michigan, G-Lee-P Dev. 1 ..... dry
OTTAWA COUNTY
Wright—J. Kluting, Wright Oil Co. 1.. dry
CASS COUNTY
Porter—Charles Stuttman, Blair & Miller 3 ..... dry
NEWYAGO COUNTY
Ashland—Wm. Bridges, Atlantic Exploration 1 ..... gas
Sherman—A. J. Bates, Newyago Oil & Gas 1 ..... dry

Wells completed 2
Dry 1
Gas 1
BERRIEN COUNTY
Near Buffalo—George Wetteran, W. E. Eldridge 1 ..... dry
Benton—Community, Dixie Oil Co. 1... dry

Wells completed 2
Dry 3

MONTCALM COUNTY
Richland—Alfred Anna, Vestaburg Oil & Gas 1 ..... dry

SHIAWASSEE COUNTY
Shiawassee—John Galloway, O. L. Barnaby & Co. 1 10
Marshall—O. J. Hubbard, St. Clair Oil & Gas 1 ..... dry

Wells completed 2
Production 10
Dry 1

ILLINOIS FIELDS

Summary of Field Operations

	Com.	Pro l.	Dry	Gas	Rig	Dig.	Ttl.
Clark	0	0	0	0	1	1	2
Cumberland	1	1	0	0	0	1	1
Crawford	6	28	2	0	1	3	4
Lawrence	1	10	0	0	0	4	4
Wabash	1	0	1	0	1	5	6
St. Clair	3	45	1	0	0	8	8
Clinton	0	0	0	0	0	2	2
Effingham	0	0	0	0	0	1	1
Randolph	1	0	1	0	0	2	2
Madison	0	0	0	0	0	2	2
Monroe	2	0	2	0	0	1	1
Edgar	0	0	0	0	0	1	1
Washington	0	0	0	0	0	1	1
Total July	15	84	7	0	3	32	35
Total June	20	662	6	0	3	28	31
Difference	5	578	1	0	0	4	4

WELLS COMPLETED
CUMBERLAND COUNTY
Union—George Kuhn, Paul J. Campbell 3 1

CRAWFORD COUNTY
Prairie—Martin Newlin, Watson & Co. 2 10
J. F. Johnson, Watson & Co. 1 ..... dry
G. G. Granby, Porterville Oil 3 15
Otto Fought, Porterville Oil 1 1
M. Williams, O. R. Oil & Gas 2 ..... dry
Oblong—J. G. Apple, Niagara Oil Corp. 12 2

Wells completed 6
Production 28
Dry 2

LAWRENCE COUNTY
Bridgeport—Clark-Morehead, Shiloh Oil Co. 1 10
Petty—H. S. Poland No. 2, Ohio Oil 1 ..... abd
Lawrence—J. W. McCleve, H. Skidmore 2 ..... abd

Wells completed 1
Production 10
Abandoned 2

WABASH COUNTY
Wabash—F. Reiber, J. D. Toomey 1 ..... dry
Joe Keyser, J. S. Young, Jr., & Co. 13. abd
Holson-Dorney, Max Oil 4 ..... abd

Wells completed 1
Dry 1
Abandoned 2

ST. CLAIR COUNTY
Sugar Loaf—Wm. Anderline, Ohio Oil 3 dry
Matilda Dyroff, Ohio Oil 25 25
O. G. Mueller, Gorman & Weihl 2 20
B. J. Mellon, Thomas Whalen 1 ..... abd
George Riddle, Otto Karbe 1 ..... abd
R. Rudolph, Cat Bird Syndicate 1 ..... abd
George Duncan, Lee & Hoffman 1 ..... abd
Missouri Pacific R.R., Moody & Seagraves 1, 2 ..... abd

Wells completed 3
Production 45
Dry 1
Abandoned 6

RANDOLPH COUNTY
Twp. 4, South 8—John Dufour, Pet. Enterprise Corp. 1 ..... dry

MONROE COUNTY
South—Hy Huch, Chambers & Co. 1 ..... dry
Harrisville—Demint & Hardy, H. M. Backus & Co. 1 ..... dry

Wells completed 2
Dry 2

MARION COUNTY
Centralia—Wm. Draege, Miller & Co. 1. abd
Schmelzer & Sanders, Miller & Co. 1 abd
Miller-Mackey Co., Miller & Co. 1 ..... abd
Jones & Co., Miller, English & Talbot 1 ..... abd

Abandoned 4

MISSOURI
Summary of Field Operations

	Com.	Prod.	Dry	Rig	Dig.	Ttl.
June	1	0	0	0	6	6

WELLS COMPLETED
ST. LOUIS COUNTY
Bonhommie—J. W. Baumhoff, J. W. Baumhoff 1 ..... dry

INDIANA FIELDS

Summary of Field Operations

	Com.	Pro l.	Dry	Gas	Rig	Dig.	Ttl.
Jay	0	0	0	0	0	1	1
Gibson	2	80	0	0	0	3	3
Pike	10	102	4	2	0	10	10
Daviess	0	0	0	0	0	2	2
Sullivan	1	0	1	0	0	4	4
Vigo	0	0	0	0	1	2	3
Spencer	0	0	0	0	0	5	5
Perry	2	0	1	1	0	5	5
Warrick	0	0	0	0	0	4	4
Crawford	1	0	1	0	0	1	1
Lagrange	0	0	0	0	0	1	1
Johnson	0	0	0	0	0	1	1
Posey	0	0	0	0	0	2	2
Putnam	0	0	0	0	0	1	1
Morgan	2	0	2	0	0	0	0
Marshall	0	0	0	0	1	1	2
Monroe	1	0	1	0	1	0	1
White	0	0	0	0	0	1	1
Floyd	1	0	1	0	0	0	0
Hamilton	0	0	0	0	0	1	1
Harrison	1	0	0	1	0	0	0
Total July	21	182	11	4	3	45	48
Total June	25	391	10	3	4	46	50
Difference	4	209	1	1	1	1	2

WELLS COMPLETED
ADAMS COUNTY
Jefferson—D. Studebaker, Berminda Oil & Gas 1 ..... abd
W. H. Smitley, Richberne Oil & Gas 4 abd

Abandoned 2

GIBSON COUNTY
Washington—C. T. Sloan, Big Four Oil & Gas 4 55
Barton—S. M. McCullough, Texanna Oil 2 25

Wells completed 2
Production 80

PIKE COUNTY
Washington—Ed. Scales, C. E. Wormer 1 dry
Lee Gorge, C. C. Talliaferro, Jr. 2 .. gas
Charles Crow, G. H. Risher 1 ..... dry
Logan—A. Atkinson, P. C. Andrews 10 25
William Phillips, Wiser Oil 6 40
M. J. Atkinson, E. C. Bolds, 6 12
M. J. Atkinson, E. C. Bolds 1, 3 .. abd
Clay—Della Kime, C. C. Talliaferro, Jr., 6 ..... dry
Marty McAtee, C. C. Talliaferro, Jr., 6 dry
Robert Hyneman, William Bell & Co. 2 gas
Neal Lindy, Mahutska Oil 1 25
Monroe—Abijah Beatty, Murphy Oil 1.. abd

Wells completed 10
Production 102
Dry 4
Gas 2
Abandoned 2

SULLIVAN COUNTY
Gill—T. B. Morris, Niagara Oil Corp. 8 abd
Turman—C. L. Davis, Charles W. Scott 2 dry
Cordia M. Willis, Niagara Oil Corp. 2. abd
Curry—A. L. Boyer, Niagara Oil Corp. 8 abd
Fairbanks—E. E. Dix, Niagara Oil Corp. 4 ..... abd

Wells completed 1
Dry 1
Abandoned 4

VIGO COUNTY
Prairie Creek—William Riggs No. 2, Siosi Oil Corp. 9 ..... abd

PERRY COUNTY
Clark—Frank Cassidy, Conyer, Roetzel & Co. 1 ..... gas
William Epple, Ohio Oil 1 ..... dry

Wells completed 2
Dry 1
Gas 1

CRAWFORD COUNTY
Whiskey Run—Perry Byrum, Louisville Cement Co. 1 ..... dry

MORGAN COUNTY
Bloomington—T. J. Ratts, Petroleum Exploration 1 ..... dry
E. S. Langford, Petroleum Exploration 1 ..... dry

Wells completed 2
Dry 2

MONROE COUNTY
Salt Creek—Claud E. Kinser, Petroleum Exploration 1 ..... dry

FLOYD COUNTY
Franklin—Section 28, Wood Oil 1 ..... dry

HARRISON COUNTY
Taylor—David Farnsley, Eureka-Indiana Oil & Gas 1 ..... gas

CENTRAL WEST FIELDS

(Continued from Page 78)

No. 3 John Backer to the lime. No. 1, which is now producing from the Cunningham sand, will be deepened to the same horizon. Conyers, Roetzel & Bugg are drilling at 440 feet in No. 2 Frank Cassidy, Section 25, Clark Township. A. F. Glenn and others are down 300 feet in the John Ramsey No. 1, Section 18, Tobin Township.

Pike County

Pike County—P. C. Andrews and others are drilling the eleventh well on the Atkinson lease, in Section 23, Logan Township. In Section 22, in the same township, E. C. Bolds completed No. 6 M. J. Atkinson at 1,030-39 feet, where it produced an initial of 12 bbls. Nos. 1 and 3 on the same farm were abandoned. Thomas J. Rendall is drilling No. 5 F. Chandler, in Section 15, Logan Township. Rischer and others found a dry hole at 1,200 feet in No. 1 Charles B. Crow, near the school house at Alford. The Bement Gas Co. completed a 1,500,000-foot gas well on the Aaron George farm, in Washington Township, and is starting another well on the same farm. C. C. Taliaferro completed No. 4 Lew George, in Section 29, Washington Township, at 1,096-1,127 feet, where it showed 1,000,000 feet of gas. William Bell and other completed No. 2 R. C. Hyneman, in Logan Township, at 1,462-73 feet, where it produced an initial of 1,700,000 feet of gas. The Blue Bird Oil Co. deepened its well on the M. Ingler farm, in Section 22, Logan Township, to 1,015 feet, where it started at 8 bbls. C. C. Talliaferro completed No. 6 Della Kime, a dry hole at 1,450 feet, in Section 12, Clay Township. Bell Brothers and others are drilling No. 1 Fred Lindy, in Section 31, Clay Township. Cox and others have started drilling No. 4 Charles McAtee, Section 23, Clay Township. C. C. Taliaferro found a dry hole at 1,600 feet in No. 6 Mary McAtee, in Location 146, same township. H. C. Darby Co. found a dry hole in No. 1 C. E. Miller, Section 26, Logan Township. The Wiser Oil Co. completed a well on the William Phillips farm, in Section 23, same township, at 1,357 feet. It started at 41 bbls. after the shot. C. E. Wommer completed a dry hole at 1,140 feet on the Ed Scales farm, in Section 30, Washington Township. Another well is to start immediately. The H. C. Darby Co. is drilling the fifth well on the George Stewart lease, in Section 23, Logan Township. Fred Hillis' well on the Neal Lindy, in Section 31, Clay Township, started at 25 bbls.

Randolph County—Henderson Brothers abandoned and plugged the test on the Loretta Bell farm, in Section 10, Jackson Township, after drilling 400 feet in the Trenton.

Spencer County—Roger E. Williams and others plan a test on the Mary Berg farm, Southwest of the Carlton farm, in Huff Township. The Packard Oil Co. drilled No. 1 Lee Carlton and No. 6 into the big lime and plugged both back to the Cunningham sand. No. 2 Adolph Grass, drilled by Theodore Seitz, on the adjoining farm, is pumping from the Jackson sand. Charles Dice is drilling at 765 feet in No. 1 Huffman, in Section 7, near Huffman Mills.

Steuben County—The Cousins Oil & Gas Co. completed a well on the Hissong farm, near Ashley, at 67 feet in the Trenton, a total depth of about 2,400 feet. It showed a small production after being shot.

Sullivan County—G. G. Billman and others are spudding in on a shallow wildcat on the Sam Conner farm, southwest of the old Reliance mine. C. W. Scott completed No. 1 C. L. Davis, in Section 14, Turman Township, and got an initial of 10 bbls. No. 2 on the same farm was dry at 852 feet. Wyman & Brown are down 1,850 feet for Thomas & Ellis in the Alva Marts test, in Section 32, Curry Township. Same company's test on the Bert Wood farm, in Section 5, one-half mile west of Farmersburg, is drilling at 1,550 feet, after Contractor Harry Adkins had been delayed by a fishing job and underreaming. Rig is up to deepen Brad Bays' No. 1 Tutt Mayfield, in the south end of the Siosi Field.

Vigo County—Sait & Dill plan a test on the B. Chickadaunce farm, in Prairie Creek Township. The Ohio Oil Co. is down 1,500 feet in No. 3 Cash Piety, in the northeast section of the Siosi Pool. Not far from this it is rigging up on the Mabel Prevo farm to offset No. 1 Ross Prevo, recently completed in the deeper sand by Hamill & Dill. The Siosi Oil Co. is down 1,900 feet in a well on the lower Riggs tract.

Warrick County—The Indiana Southern Gas & Utilities Corp. has suspended drilling in the J. T. McWilliams test in Section 33, Hart Township. The same company has erected a rig on the Henry Shumaker farm, Section 21.

MISSOURI

Eastern Missouri is making a hard struggle to find oil and gas and while only a few tests have been made, they are not discouraged but keep up the hunt for both products. The St. Elco Oil & Development Co.'s test, 660 feet from the north and east lines of the R. J. O. Reller farm, in Survey 1968, in Ferdinand Township, St. Louis County, was a duster. The Trenton in this well was found at 967 feet and the St. Peter formation from 1,600 to 1,759 feet. This company is reported drilling two other tests on the R. J. Cull property, in Survey 276, same township and county.

Wheeler and others' test 100 feet from the north line and 600 feet from the west line of the R. B. Bradshaw property, in Survey 1938, St. Charles Township, St. Charles County, was also a dry hole. In this well the Niagara formation was found from 760 to 790 feet and the Trenton lime from 840 to 848 feet. The Shell Gas Co. is drilling on the Joseph Echels, in Survey 1810, same township and county.

ILLINOIS

Three completions were reported from the Illinois Fields, two being dry and the other a small producer. The Silurian Oil Co.'s No. 20, 600 feet from the south line and 900 feet from the east line of the Thornton Combs farm, SW, Section 20, Petty Township, Lawrence County, produced but 5 bbls. from a depth of 1,680 feet. The Ohio Oil Co.'s No. 12, 250 feet from the north line and 800 feet from the east line of the E. J. Ridgley farm, SW, Section 1, Dennison Township, same county, was a dry hole in the McCloskey sand at 1,878 feet.

In the Allendale Field, Wabash Township, Wabash County, the Ridge Farm Oil Co.'s No. 4, 600 feet from the north line and 200 feet from the east line of the J. E. Gillett farm, NE, Section 14, was a duster at 1,550 feet. Max Oil Co. abandoned No. 1 Golson-Dorney, Section 18, same township.

FRED E. WOOD LEAVES CASPER FOR CHICAGO

Fred E. Wood, petroleum engineer with the Midwest Refining Co., at Casper, Wyo., for a number of years, has resigned and moved to Chicago where he will have a similar position with the

Fred E. Wood

Standard Oil Co. (Indiana), and his former executive officer, A. W. Peake, now vice president in charge of production for that company.

Mr. Wood's place at Casper has been taken by J. J. Zorichak, who had been assistant to Mr. Wood. Mr. Zorichak is a native of Pennsylvania and a graduate of Penn State where he received his bachelor of science degree in mining geology in 1923. The summer of that year he was employed by the Midwest Refining Co. at Grass Creek, where he remained until July 1, 1926, when he went to Casper as assistant petroleum engineer.

FIND OIL IN SOUTH AFRICA

Middleburg, Cape Province, South Africa, reports oil indications on a farm called Leeuwhoek, in that district. A geologist who has investigated the occurrence attaches importance to the fact that the discovery was made in the formation known as the Beaufort Beds. "Samples of oil," he says, "were submitted to a government analyst who found it to be a true mineral oil. The discovery of mineral oil in the Beaufort Beds is a new one, and in importance equal to the other world-known occurrences, such as in ridges running along the base of mountain ranges and domes on the flats." The first oil was struck at a depth of 170 feet, and at 233 feet the bore passed through two further beds of oil, when boring was suspended.